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BUFFALO NORTHWEST WATER SUPPLY
LEVEL I STUDY

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EXECUTIVE SUMMARY
NORTHWEST WATER SUPPLY PROJECT LEVEL I STUDY

PURPOSE AND NEED

The City of Buffalo (City), Johnson County (County), Johnson County Airport (Airport), and the Wyoming Water Development Commission (WWDC), in conjunction with Western Water Consultants, Inc. (WWC) conducted the Buffalo Northwest Water Supply Level I Study. The project area (Figure 1) has insufficient water supply from wells with low yield and poor water quality. The goal of this project was to evaluate the feasibility of constructing a pipeline from the City’s water distribution system to the project area, located northwest of the City. A new transmission pipeline could provide City water to approximately 51 residences near Airport Road, the Airport, and areas of future residential and commercial development northwest of the City. This study examines the potential affects to the City’s existing water distribution system, identifies potential funding options, and presents a conceptual design. The results of this Level I Study will provide the City and County (project Sponsors) with the data and recommendations necessary to decide whether to initiate a process to construct the Northwest Water Supply Project.

SCOPE ALTERNATIVE

WWC understands that the area located east of Interstate-25 and south of Interstate-90 is an area identified by the City as a potential future development area. As a scope alternative, WWC performed additional hydraulic analyses and population growth/water demand projections in this area to identify the potential to develop these areas, and pros and cons of providing water service in this area.

POPULATION AND WATER DEMAND PROJECTIONS

Population projections were performed to estimate the future water demands for the City in the Northwest Water Supply Project area. The water demands developed for the project area were used for evaluating the effects of the Northwest Water Supply Project on the City’s distribution system. Comparison to the City’s water demands shows that the Northwest Water Supply Project (existing development only) will create a 4% increase in the City’s total water demand based on the 2010 water demands and use rates.
Figure 1. Northwest Water Supply Project Area

1. Johnson County Airport
2. Northwest Water Supply Project Area
3. Buffalo City Limits
EXISTING INFRASTRUCTURE INVENTORY

Evaluation of the system was conducted and various component upgrades were identified. The recommended upgrades include a “bottleneck” in the 10-inch water main to the wastewater treatment plant and replacement of a concrete waterline from the South Tank to the Buffalo High School and Bus barn. The estimated costs associated with these upgrades are $1,110,000 and $448,847, respectively.

In addition, the City has identified three water mains planned for replacement in the next 20 years. These include: 1) a 6-inch cast iron waterline under Sunset Avenue for an estimated $299,817; 2) a 12-inch ductile iron waterline under West Gatchell for an estimated $233,574; and 3) a 12-inch ductile iron waterline under North Carrington for an estimated $376,085. All three watermains are nearing their life expectancy and are in need of replacement.

PROPOSED NORTHWEST WATER SUPPLY PROJECT OPTIONS

Multiple waterline alignments were analyzed for the Buffalo Northwest Water Supply Project and East Development Project. From this analysis, three options were selected for the Northwest Water Supply Project and two options for the East Development Project, for detailed hydraulic analysis and construction cost projections. A water storage tank located near the Johnson County Airport was also investigated. The alignment options and proposed storage tank location are shown on Figure 2.

Northwest Water Supply Project Option 1 Waterline

Option 1 for the Northwest Water Supply Project is a 12-inch PVC waterline connecting to the Eagle Summit subdivision water supply line and following an alignment across French Creek to Airport Road. This option requires a bypass waterline and pressure reducing valve (PRV) station between the connection point and the service connections in Eagle Summit. The estimated cost to construct the Northwest Water Supply Option 1 is $741,910.

Northwest Water Supply Project Option 2 Waterline

Option 2 for the Northwest Water Supply Project is a 12-inch waterline generally following the alignment of Airport Road. The proposed waterline would connect to the City’s existing infrastructure near North Main and North Buffalo Bypass and terminate
Figure 2. Northwest Water Supply Project and East Development Project Optional Alignments

- Northwest Water Supply Project
  - Option 1 Waterline
  - Option 2 Waterline

- East Development
  - Option A Waterline
  - Option B Waterline

- Airport Service Line
- Booster Pump
- Storage Tank
- Eagle Summit PRV
- Bypass Waterline
- Pump Station/PRV Station
- PRV
- Storage Tank
- East Development Option A Waterline
- East Development Option B Waterline
near the Airport in the same location as Option 1. Option 2 requires a booster pump station to provide adequate pressures to the Northwest Water Supply Project area. The estimated cost for the Northwest Water Supply Project Option 2 waterline is $1,084,035.

**Northwest Water Supply Project Option 3 Waterline**

Option 3 for the Northwest Water Supply Project is a combination of both Option 1 and Option 2 with two connection points. This option does not require the Option 2 pump station along Airport Road. However, Option 3 will require a PRV station in lieu of the pump station on Airport Road. Without the installation of a pump station this option does not allow for water to flow in a counterclockwise-direction and is therefore limited by a single-point of supply. The Northwest Water Supply Option 3 waterline estimated cost is $1,520,712.

Because Option 3 is restricted to a single-point of supply, this option could be improved with the installation of the pump station proposed in Option 2 to create a “looped” system. The Northwest Water Supply Option 3 with pump station has an estimated additional cost of $482,425 more than the estimated Option 3 waterline cost of $1,520,712 for a total of $2,002,597. Alternatively, the system could be upgraded with a water supply tank.

**Water Supply Tank**

As an optional system upgrade, a water storage tank is proposed at the system highpoint. The tank would provide constant pressure, fire flow protection, and redundant water supplies, which would obviate the need for the Option 3 pump station. The estimated costs for a 500,000-gallon or a 1,000,000-gallon storage tank are $785,287 and $1,563,296, respectively.

**East Development Option A Waterline**

The first option (Option A) for water supply to the East Development area incorporates the Northwest Water Supply Project Option 3 and assumes construction of Option A after or simultaneously with Option 3. In Option A a single 12-inch PVC waterline would supply the East Development area. The East Development Option A estimated cost is $675,772.

**East Development Option B Waterline**

A second option (Option B) for a water supply line to the East Development area assumes no development of the Northwest Water Supply Project. This option would require that multiple lines be installed to provide the required design capacity and pressures to the transmission line crossing beneath Interstate-25. This option includes
two 8" supply waterlines and one 12" supply waterline. The East Development Option B estimated cost is $1,115,075.

PRIORITIZATION AND RECOMMENDATIONS

The nonstructural and structural recommendations discussed in the Northwest Water Supply Project Level I Study have been prioritized for consideration.

Nonstructural Recommendations

Recommendations for improvements to the City’s operation of the water distribution system have been made in various Chapters of the Northwest Water Supply Project Study, and are as follows:

- It is recommended that City Ordinance Section 10A-2 Design Flow be updated to standards more representative of actual usage (500 gallons per day per capita for maximum design flow).
- A recommendation is provided in the report for an alternate investment for the City’s Water Accounts that are currently earning a very low interest rate.
- It is recommended that the City update and improve its WaterCAD model to address several core inaccuracies.

Structural Replacement Recommendations

The prioritization criteria for the structural replacement recommendations are based on a Ranking Criteria Equation (RCE). The higher the RCE value the higher the improvement priority.

\[
\text{RCE} = \text{Lifespan Adjustment} \times \text{Volume Index} \times \text{Cost Variables}
\]

The prioritization determined for the structural replacement recommendations is 1) the concrete waterline (RCE=254), 2) North Carrington (RCE=80), 3) Sunset Avenue (RCE=75), and 4) West Gatchell (RCE=57).

Structural Improvement Recommendations

Two separate areas were identified for recommended structural improvements to the City’s water supply/distribution system: 1) the Northwest Water Supply Project, and 2) the East Development Area.

The recommended options were determined based on a modified Ranking Criteria Method. Because each option proposes new infrastructure, the variable applied for aging is neglected. The prioritizations determined for the Northwest Water Supply Project are 1) Option 2 (RCE=8.5), 2) Option 3 (RCE=6.8), 3) Option 1 (RCE=5.9), and
4) Option 3 with pump station (RCE=5.2). Although the Option 2 waterline has the highest RCE value, the Option 3 waterline would result in future cost savings to the City of approximately $439,300 during the East Development project. By subtracting the future cost savings from the initial cost of Option 3 the final RCE for Option 3 would be 9.9. Therefore, the recommended option for the Northwest Water Supply Project is Option 3.

The RCE was not used for the East Development options for two reasons: 1) both waterlines fix the current bottleneck problem under I-25, and 2) both options supply the entire East Development area. Therefore, the only ranking criteria used for the East Development is the construction cost.

Proposed Water Storage Tank Recommendations

As specified by WDEQ Rules and Regulations Chapter 12, Section 13, a tank shall be sized such that it will provide clearwell and system storage capacity equal to 25% of the design maximum daily demand, plus added fire storage based on recommendations established by the State Fire Marshall. Under these assumptions, the required capacity of the water storage tank is 384,250 gallons. The 500,000-gallon storage tank would provide adequate storage for the proposed development areas in the Northwest Water Supply Project area.

WATER SYSTEM FINANCING

Many financing programs are available to the City for the various projects that are currently being considered. The Northwest Water Supply Project has five grant programs and five loan programs available to it. Table 3 contains a summary of these available grant and loan programs.

City of Buffalo Water System Revenue and Costs

The City’s 2011 projected water budget has a projected surplus of $255,250, which is based on the past five years. The budget surplus includes $35,000 of projected water tap fees and $120,000 earmarked for water debt bonus payments. The City currently holds two water loans (Drinking Water state Revolving Fund and WWDC) for a total of $11,272,000 and two water accounts (the Water Debt Reserve Account and the Operation and Maintenance Account) with a total amount of $4,398,000.

City of Buffalo Adjusted Water Accounts

The City’s Water Accounts are currently earning very low interest rates. The Wyoming State Treasurers’ Asset Reserve (WYO-STAR) program was investigated as an alternate investment option that would result in higher yields than are currently being
Table 3. Funding Sources Summary

<table>
<thead>
<tr>
<th>Funding Program</th>
<th>Administration</th>
<th>Maximum Grant %</th>
<th>Typical Grant %</th>
<th>Loan Interest Rate</th>
<th>Origination Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWDC</td>
<td>WWDC</td>
<td>75%</td>
<td>67%</td>
<td>4.0%</td>
<td>--</td>
</tr>
<tr>
<td>Wyoming Drinking Water State Revolving Fund</td>
<td>WDEQ</td>
<td>--</td>
<td>--</td>
<td>2.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Mineral Royalty Grant Program</td>
<td>SLIB</td>
<td>75%</td>
<td>50%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Joint Powers Act Loans</td>
<td>SLIB</td>
<td>--</td>
<td>--</td>
<td>5.17%</td>
<td>1.0%</td>
</tr>
<tr>
<td>USDA</td>
<td>USDA</td>
<td>75%</td>
<td>25%</td>
<td>3.75%</td>
<td>--</td>
</tr>
<tr>
<td>Wyoming Community Development Block Grant Program</td>
<td>Wyoming Business Council</td>
<td>$500,000</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Business Ready Community Grant and Loan Program</td>
<td>Wyoming Business Council</td>
<td>$1,000,000</td>
<td>--</td>
<td>Zero to low</td>
<td>--</td>
</tr>
<tr>
<td>Grant/Loan/Cost Sharing Agreement</td>
<td>Johnson County</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

realized in the City’s Water Accounts. The average interest rate for WYO-STAR program over the last four years was 1.922%, which is significantly greater than the 0.21% interest being earned by the City’s Water Accounts currently.

Costs of Major Repairs in Next Twenty Years

Major construction projects planned for the City will require an estimated yearly payment of $146,270. The interest received from the City Water Reserve/Operation Accounts does not produce the funds necessary to pay for major repairs or projects that will be required over the next 20 years. This deficit has several solutions such as: higher earning water accounts, utilizing earmarked hydroelectric revenue, or apply for funding assistance.

Northwest Water Supply Project Costs

The estimated life-cycle cost for operation, maintenance, and overhead of the recommended Northwest Water Supply Project Option 3 is $2,071,700. This estimate is based on the assumption of a 50-yr. project lifespan.

Four options exist for WWDC funding of the Northwest Water Supply Project, which are shown in Table 4. In all funding options, a loan interest rate of 4% and a loan term of 30 years were assumed for repayment of the Northwest Water Supply Project construction cost. These values can be compared to the projected annual water rates ($43,680) and total water tap fees ($260,000) from the existing development in the project area. Water tap fees will likely not contribute directly to the Northwest Water
Supply Project water debt. However, these will likely be used to retire other water related debt (i.e., the water treatment plant therefore they are shown as reference).

Table 4. Northwest Water Supply Project WWDC Funding Scenarios

<table>
<thead>
<tr>
<th>Funding Scenario</th>
<th>Required Annual Loan Payment (30-years)</th>
<th>Required Annual O&amp;M Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>67% Grant; 33% Loan</td>
<td>$29,020</td>
<td>$12,937</td>
</tr>
<tr>
<td>0% Grant; 100% Loan</td>
<td>$87,940</td>
<td>$12,937</td>
</tr>
<tr>
<td>67% Grant; 33% Loan and Projected Water Tap Fees</td>
<td>$13,990</td>
<td>$12,937</td>
</tr>
<tr>
<td>0% Grant; 100% Loan and Projected Water Tap Fees</td>
<td>$72,910</td>
<td>$12,937</td>
</tr>
</tbody>
</table>

City of Buffalo Adjusted Water Rates

The traditional funding for major repairs/projects is from the interest earned on a O&M account. Currently the City is $39,790 short per year in required funds to cover the projected major repairs over the next twenty years. Although the City is short of the required funds for major repairs several solutions exist for this situation such as: 1) utilize the hydroelectric revenue ($120,000) that is earmarked for water debt bonus payments; 2) invest the City’s Water Accounts in a higher earning account; and 3) apply for funding assistance for the distribution system waterline replacements.

As part of the construction of the Northwest Water Supply Project, additional funding may be required through water rate increases by the City. A WWDC 33% loan/67% grant scenario for the recommended Option 3, will not require the City to raise its water rates. However, 100% loan/0% grant scenario will require the City to raise its water rates by approximately 4.6% to make the annual loan payments.

Northwest Water Supply Project Debt Retirement

The debt retirement schedule for the Northwest Water Supply Project Option 3 is shown in Table 10 assuming a 67% grant/33% loan scenario from WWDC. The payment plan associated with this debt retirement schedule includes the projected revenue to the City from water rates in the Northwest Water Supply Project Area only. Please note the total of the operation and maintenance and loan annual payments is less than the projected water rates of $43,680. Therefore, the estimated annual payment includes a bonus payment to the loan principal equal to the difference.

Water System Financing Recommendations

As is shown by previous tables, the WWDC 67% grant/33% loan option would allow the Northwest Water Supply Project to be a self-supporting entity. Also the loan for the
Northwest Water Supply Project would be paid in full in 30 years, which allows the City to generate revenue for the final 20 years of the life of the project. As such, the recommended funding option for the Northwest Water Supply Project is the WWDC 67% grant and 33% loan. If interest is expressed by the Sponsors to construct the proposed water storage tank and East Development waterline in conjunction with the Northwest Water Supply Project waterline, WWDC would be the recommended funding agency.

Table 10. Debt Retirement Schedule for Northwest Water Supply Project

<table>
<thead>
<tr>
<th>Year</th>
<th>Balance</th>
<th>Interest</th>
<th>O&amp;M and Administrative Fees</th>
<th>City Payment</th>
<th>NW Water Projected Revenue</th>
<th>Total Annual Payment (O&amp;M and Loan)</th>
</tr>
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<tr>
<td>2015</td>
<td>$(501,835)</td>
<td>$(20,073)</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>41,957</td>
</tr>
<tr>
<td>2020</td>
<td>$(453,377)</td>
<td>$(18,135)</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>41,957</td>
</tr>
<tr>
<td>2025</td>
<td>$(394,421)</td>
<td>$(15,777)</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>41,957</td>
</tr>
<tr>
<td>2030</td>
<td>$(322,692)</td>
<td>$(12,908)</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>41,957</td>
</tr>
<tr>
<td>2035</td>
<td>$(235,422)</td>
<td>$(9,417)</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>41,957</td>
</tr>
<tr>
<td>2040</td>
<td>$(129,246)</td>
<td>$(5,170)</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>41,957</td>
</tr>
<tr>
<td>2045</td>
<td>$(65)</td>
<td>$(3)</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>41,957</td>
</tr>
<tr>
<td>2050</td>
<td>$152,675</td>
<td>$73</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>12,937</td>
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<tr>
<td>2055</td>
<td>$309,076</td>
<td>$74</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>12,937</td>
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<tr>
<td>2060</td>
<td>$467,443</td>
<td>$75</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>12,937</td>
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<tr>
<td>2065</td>
<td>$627,799</td>
<td>$76</td>
<td>$(12,937)</td>
<td></td>
<td>43,680</td>
<td>12,937</td>
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</table>
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<th>Figure Number</th>
<th>Description</th>
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<tr>
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LIST OF EXHIBITS

Exhibit 6-1.  City of Buffalo Water Supply Sources

Exhibit 9-1.  City of Buffalo Water Distribution Network

Exhibit 9-2.  City of Buffalo Water Existing Distribution Network Peak Day Demand Flow Scenario
CHAPTER 1. INTRODUCTION

Purpose and Need

The City of Buffalo (City), Johnson County (County), Johnson County Airport (Airport), and the Wyoming Water Development Commission (WWDC), in conjunction with Western Water Consultants, Inc. (WWC) conducted the Buffalo Northwest Water Supply Level I Study. The project area has insufficient water supply from wells with low yield and poor water quality. The goal of this project was to evaluate the feasibility of constructing a pipeline from the City’s water distribution system to the project area, located northwest of the City. A new transmission pipeline could provide City water to residences near Airport Road, the Airport, and areas of future residential and commercial development northwest of the City. This study examines the potential affects to the City’s existing water distribution system, identifies potential funding options, and presents a conceptual design. The results of this Level I Study will provide the City and County (project Sponsors) with the data and recommendations necessary to decide whether to initiate a process to construct the Northwest Water Supply Project.

Project Scope

The Northwest Water Supply Level I Study provides the Sponsors with the necessary data and engineering recommendations to determine the feasibility of the construction of the Northwest Water Supply Project. The project scope includes research and data analysis in various tasks as summarized in the following.

Task 1. Public Meetings

A public scoping/kickoff meeting was held in the City on August 30, 2010, early in the project schedule to familiarize the Sponsors with the scope of the project and obtain
input from potentially affected parties. Additionally project meetings were held in the City on February 17 and May 23, 2011, to provide the public with updates on the status of the project. A final presentation will be held in the City on October 13, 2011 to present the findings of the Northwest Water Supply Project Level 1 Study.

**Task 2. Review of Existing Information**

Existing information related to the City’s water supply system and the project area was reviewed to provide background, understanding and need for the project. This information included documents, reports, models, interviews, mapping data, site visits and other sources provided by the Sponsors, the WWDC, the Wyoming State Engineer’s Office (SEO), and the U.S. Environmental Protection Agency (EPA).

Previous WWDC reports on the City’s water system were reviewed for information pertaining to the Northwest Water Supply Project and are summarized in Chapter 3. Discussions with the Sponsors were held regarding local area plans, zoning ordinances, annexation policies, and regulatory requirements to identify conflicts and coordinate project objectives to meet the goals of the Sponsors.

**Task 3. Inventory, Evaluate, and Map Existing Water Systems**

Task 3 is comprised of four parts which are summarized as follows:

**Task 3A**

Task 3A included an inventory and evaluation of the existing City water distribution system and how to the Northwest Water Supply pipelines and proposed connection points might affect them. The results of this task will enable the City to determine its ability to meet current water demands and future demands developed in Task 8. Task 3A also included:
I. Components of the water distribution system needing repair or replacement, with respect to the connection points. These components were identified during interviews with City personnel.

II. The connection points to the City water distribution system were evaluated to identify components that may require repair or replacement during the next twenty years.

Task 3B
Assessment of the capacity of existing water treatment plants, wells, transmission pipelines, storage tanks, pump stations, and PRV stations was conducted. In this task “bottlenecks” and needed improvements were identified.

Task 3C
The existing and proposed changes to the water distribution system were modeled and used for hydraulic design and evaluation. The City’s existing WaterCAD model was used to analyze the water supply system.

Task 3D
Geographic data were collected for the major water system components. These components include wells, diversion structures, the City’s water treatment plant, storage tanks, pump stations, PRV stations, and transmission line locations.

Task 4. Water Source Data Collection
Data were gathered and analyzed for available water supply sources in the Project Area. These data included supply capacity, diversion rate, pumping rates, well depth, casing diameter, pump capacity, and hydrogeologic unit, as well as surface water diversions and water treatment plant capacity, as applicable.
**Task 5. Water Quality**

As part of the feasibility study, existing water quality reports were reviewed. This information was provided by the City. Data were also collected in the Project Area on the number of households using septic systems. This information is necessary to determine possible detrimental effects of wastewater on the supply well in the Project Area.

**Task 6. Review of Water Rights**

The City’s existing water rights were reviewed and inventoried. Historic use of water within the City was estimated from water treatment plant records. Historic usage was then compared to the City’s water rights to determine if there is sufficient capacity available in the existing City supply to accommodate the Northwest Water Supply Project requirements.

**Task 7. Environmental Report**

The need for an environmental report will be determined after it is known if there will be any federal involvement with the project. In consideration thereof, the project purpose, need and alternatives considered are clearly stated in this study. If determined necessary and if authorized to do so, additional information will be provided for state and federal funding agencies to enable the sponsors to prepare environmental documents as required by the National Environmental Policy Act (NEPA).

**Task 8. Population Growth and Water Demand Projections**

Growth projections for two separate service areas were developed. These areas include the northern margin of the City’s corporate limits (area between I-25 and I-90) and the extension of the water service area to the Johnson County Airport, which is
located to the north of the City. Historic population data from the Economic Analysis Division of the Wyoming Department of Administration and Information was used as the basis of the population projections. Population projections from previous WWDC reports were also utilized in this study.

Water demand projections presented in this report were developed based on population projections and water use records provided by the City. The City is currently using a tiered water rate system. The effects of increasing the water rates were investigated for project area. The City’s water metering system was evaluated to confirm that billing methods are based on actual metered water usage.

**Task 9. Water System Financing**

The City provided financial data to determine the current and anticipated future water system revenues and expenses. The current City water system revenue, operation and maintenance expenses and estimated values for the expanded water system were tabulated. Financial data presented in the report include:

- Water related debt (principal and interest),
- Operation and maintenance expenses,
- Administrative and overhead expenses, and
- Projected revenue from the Northwest Water Supply Project (water rates and tap fees)

This information was used to determine if the City’s existing water system is financially self-supporting. Recommendations for adjustments in water rates were developed based on the following scenarios:
1) No funding assistance available for the water system improvements associated with the Northwest Water Supply Project.

2) Funding assistance for improvements might be obtained from the Federal Aviation Administration (FAA), City, County, Wyoming Water Development Commission Program, Rural Utilities Service (RUS), State Lands and Investments Board, the Wyoming Drinking Water State Revolving Fund, and Business Ready Community Grant and Loan Programs.

**Task 10. Creation of a Geographic Information System (GIS)**

GIS data files were created for the City using data collected during this study for the area between the northern boundaries of the City and the Airport. These collected data include locations of proposed connection points, essential system components, information related to those components, and other pertinent details.

**Task 11. Prioritization of Recommendations**

Two matrices of recommendations were developed during this study to facilitate prioritization of the project. The first matrix addresses non-structural improvements (i.e., ordinances, investment accounts, WaterCAD Model) suggested for the funding, operation, and maintenance of future upgrades to the system. The second matrix addresses needed infrastructure improvements. The Sponsors and WWDC’s Project Manager in conjunction with WWC prioritized the recommendations and developed a schedule identifying a phased approach for implementation of the recommendations presented in this study.
**Task 12. Cost Estimates**

Alternative costs were developed under this task. Life-cycle cost analyses of the project components were prepared for the preferred alternative. This analysis includes the life-cycle costs of project components and their expected repair, maintenance, and replacement. Also, included are suggested annual contributions into a repair and maintenance fund and an emergency fund.

Project cost estimates were prepared for the water supply option. These estimates include construction costs, operation and maintenance costs, administrative costs, project debt retirement, and costs that are not eligible for WWDC funding.

**Task 13. Draft, Final and Executive Summary Reports**

The Northwest Water Supply Project included submission of a draft report for review and comments to WWDC and the Project Sponsors. The draft report was revised to address these comments, and the final report was submitted to WWDC and the Project Sponsors.

**Scope Alternative**

It is WWC’s understanding that the area located east of Interstate-25 and south of Interstate-90 is an area identified by the City as a potential future development area. As a scope alternative, WWC performed additional hydraulic analyses and population growth/water demand projections in this area to identify the potential to develop these areas, and pros and cons of providing water service in this area, to evaluate the effect of the preferred alternative on the needs of this development.
**Project Team**

WWC worked in conjunction with WWDC, the City and the County to provide a Level I feasibility study for the Northwest Water Supply Project. Project meetings were held with City personnel to develop the WaterCAD model. This model was used to update the City's GIS data. City utilities personnel contributed information concerning various distribution issues the City is currently experiencing and provided their recommendations for connection locations and pipe sizing. The WWDC was instrumental in managing the development of the project. Johnson County provided GIS data of the project area landowners and data used to develop proposed land uses and population densities.

**Report Summary**

This report describes research and analysis performed in the Northwest Water Supply Project Study. The study provides recommendations for expanding the existing water distribution system to include the proposed Northwest Water Supply Project and the East Development Area, and identifies potential areas of concern.
CHAPTER 2. BACKGROUND

The Northwest Water Supply Project Area (Figure 2-1) includes approximately 51 existing residences and the Johnson County Airport. The total number of potential service taps is 52.

A questionnaire was sent out to the 45 residents in the Project Area in October 2010. The residents in the vicinity of the Airport and along Airport Road utilize individual wells that produce water of poor quality for drinking. Approximately 33% of the wells are unsuitable for consumption. Approximately 50% of the residents haul potable water from the City and approximately 80% of residents in the northwest Buffalo project area expressed the opinion that an improved water source is needed.

Currently, water supply for the Johnson County Airport is from a well that is nearing its life expectancy. According to local area residents and the Airport, the well yields poor water quality with objectionable taste and odor. Additionally, the well yields minimal discharge that is not sufficient for fire protection. To help meet peak demands a cistern was installed. However, the total yield from the well is insufficient even for small water demands, such as sanitary use in the Fixed Base Operations building and occasional washing of airplanes and walks. Water availability is a constraint on future expansion and modernization of the airport.

Lack of an adequate potable water supply to the northwest Buffalo area has hindered Airport operations, limited safety and prevented residential and commercial development. Therefore, the City and County with support from the Wyoming Water Development Commission initiated the Northwest Water Supply Level I Study.
Figure 2-1. Northwest Water Supply Project Area

- Johnson County Airport
- Northwest Water Supply Project Area
- Buffalo City Limits
CHAPTER 3. REVIEW OF EXISTING INFORMATION

Introduction

This study necessitated thorough review of existing information, including comprehensive plans, ordinances, previous water related studies, existing models, interviews, and field reconnaissance. This study reviewed information available through the City, WWDC, SEO, and County. The information obtained from this research provided a basis for planning and modeling project goals and aided in identifying conflicts. The following sections summarize the findings of this research.

City of Buffalo Water Related Studies, Plans and Reports

There are seven previously completed studies related to the Northwest Water Supply Project. The studies include:

- Buffalo Hydrogeologic Reconnaissance (Plains Engineering, 1982),
- Municipal Water Supply Study for the City of Buffalo, Wyoming Level I Reconnaissance Study (WWC, 1982),
- Level I Reconnaissance Study of Supplemental Municipal Water Supply for the City of Buffalo, Wyoming (Tipton & Kalmbach, 1984),
- City of Buffalo Water Supply Alternatives Summary Report (WWDC, 1987),
- Buffalo Municipal Reservoir Project (SWWRC, 1988),
- Town of Buffalo Water Storage Tank Level II Project (SWWRC, 2002) and
- City of Buffalo – Sheridan Area Water System – Lake DeSmet Level I Study (HKM Engineering, 2008).

The City and the County have also developed comprehensive plans that include population growth projection and water development plans. The City and County have a memorandum of understanding for growth management around the City. The comprehensive plans and memorandum include:
• Johnson County/City of Buffalo Growth Management Agreement and Memorandum of Understanding.

• Comprehensive Land Use Plan (Johnson County, 2005).

• Buffalo, Wyoming Comprehensive Plan 2007 (Buffalo, 2007).

The following is a brief summary of existing studies, reports and plans relating to the City’s water supply and distribution system.

**Buffalo Hydrogeologic Reconnaissance**

In 1982, a hydrogeologic study was conducted by Plains Engineering covering the area within a 10-mile radius of the City. The study includes a review of previous groundwater studies and data, field investigations of geology, surface-groundwater connections, groundwater samples and analysis. The conclusions found in this report are:

• The Bighorn Mountains major geologic structures control the groundwater in the study area,

• Good quality groundwater is found in isolated bodies of the Madison Aquifer, the Clear Creek alluvium, and the Tertiary scoria result from local recharge and short transit times,

• Limited local recharge and short transit times result in high quality groundwater aquifer units (Madison, Clear Creek alluvium, and Tertiary scoria) which are directly connected to surface water flow or recharge of the Wasatch Aquifer and full appropriation of surface waters and full development of the Wasatch Aquifer by domestic wells constrains development of the units,

• The Moncrief Member of the Wasatch Formation appears to be not currently appropriated, since it is associated with thrust faulting on the mountain flank, except where it is connected to surface water or the Wasatch Aquifer,

• Deep Powder River Basin aquifer units are cut off from outcrop recharge by deep faults causing waters in these units to be old and of very poor quality,
• Artificially recharged groundwater mounds below irrigation canals in Clear and French Creek could provide a supplemental resource to the peak use,

• Irrigation canal waters lost by channel seepage are considered part of the irrigation appropriation and use of these waters by exchange is prohibited without changing the use of the permit, and

• No single source of groundwater will meet peak demand projections (7 cubic feet per second (cfs)).

Municipal Water Supply Study for the City of Buffalo

In 1982, a municipal water supply study was completed by WWC Engineering to investigate the need for a supplemental water supply to meet the City’s existing and projected municipal water requirements. The alternatives considered to supplement the municipal water supply included:

• Promote conservation in the use of water,

• Improve Clear Creek diversion facilities,

• Supplement the supply with ground water,

• Purchase agricultural rights,

• Divert water from Lake DeSmet, and

• Develop storage capacity in the Clear Creek Drainage Basin.

The 1982 Municipal Water Supply Study primarily investigated additional direct flow water rights for the City. This report provided detailed information related to the City’s existing water rights and potential water supply sources that could be developed in the event of future expansion of the City.
Level I Reconnaissance Study of Supplemental Municipal Water Supply for the City of Buffalo, Wyoming

In 1984, Tipton and Kalmbach investigated the alternatives involving water rights of the City being supplemented by storage rights in Lake DeSmet owned by Texaco Inc. The conclusions and recommendations of this study were:

- The only viable storage reservoir in the Clear Creek Basin upstream of Texaco's Clear Creek diversion point is the Little Sourdough Reservoir,
- Texaco was interested in helping the City of Buffalo by providing water from its existing Healy or Lake DeSmet Reservoirs or by designating an alternate point of storage for 1,000 acre-feet (ac-ft) of its Lake DeSmet Reservoir water,
- Four development plans were investigated that would yield the required water supplies to satisfy a population of 9,505 (estimated year 2035) and three of the four plans could satisfy a larger population,
- The development plan designated the alternate of developing the City's Little Sourdough Reservoir as the point of storage having the greatest dry-year yield potential. Also, Texaco would designate the Little Sourdough Reservoir as an alternate point of storage for 1,000 ac-ft of its Lake DeSmet Reservoir Permit,
- The preferred and most cost-effective option considered was a water exchange, wherein water would be released to Clear Creek at Healy Reservoir for use by downstream appropriators and the City would divert an equal amount at some point upstream of Healy Reservoir where surplus water is available.

City of Buffalo Water Supply Alternatives Summary Report

In August 1986, the EPA notified the City that it had a high risk for potential contamination by pathogenic microorganisms. In response to this notification the WWDC, in association with the City, prepared a water supply alternatives report in 1987. This report summarized the previous studies completed after 1980 and dealt directly with the issues of supply, storage, and treatment. This report summarized previous improvements to the water supply system and identified additional improvements needed to reduce the risk of potential contamination. The
recommendations made in this report were to construct a water treatment plant and a 2.5-million-gallon storage tank that would comply with EPA standards and satisfy peak demands. The report further recommended investigation of possible mountain storage options through acquisition of existing storage or reservoir construction or enlargement of existing reservoirs (Tie Hack Reservoir, formerly Little Sourdough Reservoir). The recommendations provided in this report have all been constructed by the City.

Buffalo Municipal Reservoir Project

In the mid-1980s, pressure deficiencies were identified in the City’s water distribution system through the summer months, which resulted in watering restrictions. It was determined that these deficiencies were a result of low flows in Clear Creek, primarily due to irrigation withdrawals. In 1988, a study was conducted by States West Water Resources Corporation to evaluate development of a municipal storage reservoir in the Clear Creek drainage basin to the west of Buffalo. The proposed reservoir would be used to supplement Clear Creek flow with water releases when the direct flow of Clear Creek could not fulfill the City’s water demands. This study proposed the preliminary site and size of the Tie Hack Reservoir, which was built in 1992.

Johnson County/City of Buffalo Growth Management Agreement and Memorandum of Understanding

In 1997, the City and County set forth an agreement to encourage orderly urban and suburban growth in the Buffalo Urban Growth Area. This memorandum also established an agreement to coordinate the development of the water services to encourage all lands developed in the Buffalo Urban Growth Area to be developed with community water unless delivery of the public utility is impractical. This memorandum provides a basis for the goals of the Northwest Water Supply Project.
Town of Buffalo Water Storage Tank Level II Project

As population increased, the City was not able to meet peak daily demands due to insufficient treated water storage. In addition, the City was experiencing problems maintaining pressures and meeting fire flows in the northern portions of the City. In 2002, a study was conducted by States West Water Resources Corporation to develop a plan for expanding the City’s treated water storage capacity. The new infrastructure proposed by this study was:

- A 2.5-million-gallon tank to the west of the North Ridge subdivision
- Service piping in the Eagle Summit & North Ridge subdivisions
- 11,500' of 18" water main,
- 9,000' of 16" water main, and
- Three pressure reducing stations.

The Water Storage Tank Level II Project provided the planning for the construction of the water transmission pipeline and storage tank located west of the City. This project provided water storage near the Northwest Water Supply project area and resulted in new infrastructure that makes gravity-flow water supply to the project area feasible.

Comprehensive Land Use Plan

In 2005, the County completed a comprehensive land use plan. In the 2005 study, the County investigated agriculture, residential, commercial, and industrial land use, public facilities, transportation, future land uses, and future land and resource management. Projected land use identified in this report was used in projecting development areas for the Northwest Water Supply Project. The land use plan was also used in developing a population density projection for future development near the
City. These components were significant in developing water demands for the proposed Northwest Water Supply project area.

**Buffalo Wyoming Comprehensive Plan 2007**

In 2007, the City completed a comprehensive plan for managing the City’s growth. In the 2007 study, the City developed a future land use and roads map. The comprehensive plan investigated potential economy, population, housing, public infrastructure, development limitations, and transportation in and around the City. The results of the 2007 study were used to forecast development in the Northwest Water Supply project area and estimate the locations and demands for water supplies.

**City of Buffalo – Sheridan Area Water System – Lake DeSmet Level I Study**

In 2008, a joint study for the City, Sheridan Area Water System (SAWS) and Lake DeSmet was conducted by HKM Engineering to evaluate water supply in Sheridan and Johnson Counties. The focus of the study was to examine water supply for the needs of a growing SAWS service area, the City and the surrounding areas. The study had three local sponsors – the City, the Sheridan Area Water Supply Joint Powers Board, and the Lake DeSmet Counties Coalition. Topics in the study germane to the City and the Northwest Water Supply Project are:

- Estimates for future growth and water demand for the City and the surrounding rural area.
- Analysis of the City’s water system capacity for future growth, and conceptual plans for improvements.
- Evaluation of the City’s current water rights and the availability of additional rights from current sources.
- Evaluation of other long-term water supply options.
- Development of plans for a conceptual regional system in the rural areas around the City.

- Development of a pre-feasibility study for Lake DeSmet being the source of water for a regional water system.

The City of Buffalo – Sheridan Area Water System – Lake DeSmet Level I Study provided projected population growth, water demands and water supply sources that were used in the Northwest Water Supply Project feasibility study.

**Water Related Studies, Plans & Reports - Summary**

The above referenced studies and reports provided valuable information for the Northwest Water Supply Project. This information includes projected population growth, projected water demands, the City’s water rights, available water sources, background information on the water distribution system and recommendations for improvements to the water distribution system. A memorandum included in Appendix D has been prepared with the current status of the recommendations provided in the previously performed WWDC studies.

**Existing WaterCAD Model**

The City provided WWC with its existing Bentley Haestad WaterCAD Model for analysis of the Northwest Water Supply Project. The model was last updated during design of the Buffalo Water Storage Tank Level II Study. According to City personnel, the model-calculated water pressures corresponded closely to measured pressures prior to the year 2000. As the City’s Contract Engineer, WWC has reviewed and revised the WaterCAD model in isolated areas in the recent past. These revisions to the WaterCAD model include the following:
• The connection types for water tanks was revised to produce more accurate results.
  
  o The City’s original WaterCAD model was created with tanks that were simulated as a junction. However, if there are two pipes connected to one tank only one pipe can have flow (i.e. either supply or demand). In order to model the system with flow in multiple directions simultaneously, tanks were modeled as an independent junction connected to the main with a short segment of pipe.

• At the time of the last update (January 2009), an 8-inch line under Fort Street was closed.
  
  o Discussions with City personnel indicated the line is now in use and has been included in the current WaterCAD model.

• Water supply types have been updated from a junction with a negative demand (which adds water to the system) to reservoirs.
  
  o A reservoir was placed in the location of the supply junction to address the unreasonably large negative pressures modeled along Fort Street and prevent the model from being limited by a user-defined water supply rate.

• The elevations of several junctions were corrected from zero to their approximate elevations relative to adjacent junctions.
  
  o In the area of the intersection of S. Bypass Road and E. Brock Street, the following junctions were previously modeled at elevation zero; J-277, J-279, J-280, J-281, J-283, J-285, and J-286. The elevations of these junctions were updated to estimated values based on adjacent junctions.

For the Northwest Water Supply Project analysis revisions to the City's WaterCAD model include:

• Removing Mountain Ridge subdivision as it is not part of the City’s water distribution network,

• Correcting the locations of the west and south treated water tanks and associated piping,

• Adding missing waterlines on the northern extent of the City’s corporate limits, and
- Correcting pipe sizes, materials and locations for various water mains in the northern end of the City.

Their corrections and revisions were made to the City’s WaterCAD model to calibrate the model to actual field data. However, due to systematic inaccuracies (i.e., inaccuracies in infrastructure location, scale, and spatial reference) it is recommended that the City consider developing a new WaterCAD model. The existing model could also be corrected; however, due to inaccuracies in spatial reference each waterline would be required to be fixed individually. Therefore, a new WaterCAD model would be more cost effective than updating/correcting the existing WaterCAD model. A new WaterCAD model would facilitate preliminary design of supply and distribution waterlines in the City which would decrease substantially costs on future water related projects in the City.
CHAPTER 4. REVIEW OF WATER RIGHTS

Introduction

Construction of the Northwest Water Supply Project will increase municipal water demand for the City. These demands are quantified in later portions of this report. To confirm that the City has sufficient water rights to meet increased demands, a thorough review of the City’s water rights was conducted. The following summarizes the City’s water rights. This information was collected primarily from the Municipal Water Supply Study for the City of Buffalo, Wyoming Level I Reconnaissance Study (WWC, 1982) and additional details were obtained from the SEO and the City records.

City of Buffalo Water Rights

The City holds seven direct-flow water rights which have two permitted points of diversion on Clear Creek, both of which enable diversion of raw water to the water treatment plant. All of the direct-flow water rights are adjudicated, and six of the seven are permitted for municipal use. The seventh water right is permitted for domestic, stock and irrigation use. Four of the seven water rights are Territorial (pre-1890) direct-flow water rights on Clear Creek with a total appropriation of 7.95 cfs. The remaining three water rights are the McNeese Ditch (Permit 5105E for diversion of 2.08 cfs), Rock Creek and Piney Reservoir and Ditch Company Canal (Permit 23403D for diversion of 2.0 cfs), and Pipeline Ditch (Permit 19276D for diversion of 2.0 cfs) with priorities of February 14, 1938, November 21, 1968 and December 7, 1939, respectively.

The Rock Creek and Piney Reservoir and Ditch Company Canal (23403D) is permitted with South Fork South Piney Creek as the source. The water is used by exchange, whereby water is diverted from Clear Creek for municipal use by the City and
an equal amount of water is diverted from South Fork South Piney Creek into the Rock Creek Ditch, thence to Rock Creek, thence to Clear Creek where it is used by irrigators participating in this exchange agreement. The McNeese Ditch, City Enlargement (5105E) is permitted for domestic, irrigation and stock use, and is not permitted for use by the City as municipal supply. Because domestic beneficial use is limited by statute to a maximum supply for three single family dwellings and irrigation of less than one acre, a change of use petition would be required to use Permit 5105E for municipal use. As part of the study, WWC investigated this option. In order for a water right to be eligible for transfer by a change of use petition, historic beneficial use must have occurred in the last 5 years when water was available. According to the SEO District #2 Superintendent water was available for diversion during this time but no water was diverted. The District #2 Superintendent also indicated that due to the late priority date of this water right it is typically out of priority early in each irrigation season. For these reasons, it is the District #2 Superintendent’s opinion that it would not benefit the City to file a petition for change of use on this permit.

The Buffalo Water Wagon Pipeline and Ditch (23403D) is used in conjunction with the storage water right of Willow Park Reservoir (6408R). The permit is currently filed as having a maximum flowrate of 2 cfs for a volume of 100 acre-feet per year (ac-ft/yr) from Willow Park Reservoir. The City purchased an additional 50 ac-ft/yr in Willow Park Reservoir in 1994; however the permit has not been enlarged to enable more than 2 cfs to be diverted by the City from Willow Park Reservoir. Currently, the additional 50 ac-ft is unpermitted therefore it does not have a priority date. The SEO is aware of the City purchasing the additional capacity and is currently allowing the City to use this
water without having filed an enlargement. The SEO only allows the City to use this water at times when diversion of the water will have no effect on irrigators between the POD and the confluence of Rock Creek and Clear Creek. However, the SEO has requested that an enlargement be filed for Permit 23403D for the use of the additional 50 ac-ft/yr now owned by the City.

The City’s direct-flow water rights are provided in Table 4-1. The appropriated amounts are not the total appropriation amount of the individual water rights, but rather the amount the City has available to use for municipal/domestic purposes (additional appropriators may share a portion of these water rights).

The City also has storage water rights in Tie Hack Reservoir. The Tie Hack storage water rights are used to supplement flow in Clear Creek during the summer months, specifically to maintain flow below the City’s diversion. As stated in the City of Buffalo-Sheridan Area Water System-Lake DeSmet Level I Study (HKM 2008), the Corps of Engineers has imposed permit conditions on Tie Hack reservoir requiring that a flowrate of 7.2 cfs must be maintained at the outlet of the reservoir and that storage water must be released to insure 6.0 cfs or more below the City of Buffalo diversion structure.

The Willow Park storage water rights are used in conjunction with the Rock Creek and Piney Reservoir and Ditch Company Canal (23403D), as stated previously, for a maximum of 100 ac-ft (+50 ac-ft not permitted) at 2 cfs as shown by Table 4-1. The natural flow of Clear Creek will be diverted in exchange for an equal amount of stored water released from Willow Park Reservoir, which is on South Piney Creek. No exchange of water is allowed under this permit, except when water is legally available.
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<tr>
<td>3 Terr 4841</td>
<td>Snider No. 4 Ditch</td>
<td>Farm Investment Co.</td>
<td>04/30/1883</td>
<td>Adjudicated</td>
<td>Mun</td>
<td>6 50N 82W</td>
<td>Clear Creek</td>
<td>0.43</td>
</tr>
<tr>
<td>4 Terr 4844</td>
<td>Snider No. 3 and 1 Ditch</td>
<td>Farm Investment Co.</td>
<td>06/20/1883</td>
<td>Adjudicated</td>
<td>Mun</td>
<td>6 50N 82W</td>
<td>Clear Creek</td>
<td>0.52</td>
</tr>
<tr>
<td>5 105E</td>
<td>McNeese Ditch, City Enlargement</td>
<td>City of Buffalo</td>
<td>2/14/1938</td>
<td>Adjudicated</td>
<td>Dom, Irr, Sto</td>
<td>6 50N 82W</td>
<td>Clear Creek</td>
<td>2.08</td>
</tr>
<tr>
<td>6 23403D</td>
<td>Rock Creek and Piney Reservoir and Ditch Company Canal</td>
<td>City of Buffalo</td>
<td>11/21/1968</td>
<td>Adjudicated</td>
<td>Mun</td>
<td>6 50N 82W</td>
<td>South Fork South Piney Creek</td>
<td>100 ac-ft 2.00 cfs</td>
</tr>
<tr>
<td>7 19276D</td>
<td>Pipeline Ditch</td>
<td>City of Buffalo</td>
<td>12/7/1939</td>
<td>Adjudicated</td>
<td>Dom, Irr, Mun, Ind</td>
<td>6 50N 82W</td>
<td>Clear Creek</td>
<td>2.00</td>
</tr>
</tbody>
</table>

1 Certificate issued to successor of Buffalo Mill Co. changing right from milling purposes to municipal resulting in a reduction of 36.00 cfs from 40.00 cfs; and point of diversion and means of conveyance changed to the Buffalo Water Pipeline & Ditch. As stated in the City of Buffalo-Sheridan Area Water System-Lake DeSmet Level I Study (HKM 2008) this water right of 4.00 cfs, is regulated during the summer in dry years to an available flow of 3.95 cfs. Regulation of this water right can last from mid-June to the end of September.

2 Point of diversion and means of conveyance for 1.00 cfs changed to Carwile-Lobban Ditch for the irrigation of Willow Grove Cemetery, 3.00 cfs remains for City of Buffalo municipal use.

3 71.42 acres (1.02 cfs) detached from the irrigation of 145.0 acres (2.07 cfs) of which 0.43 cfs changed to preferred use for municipal purposes for the Town of Buffalo (only to be used May 16 through September 15 of each year) and 0.59 cfs is to remain in stream in lieu of return flow.

4 60.0 acres (0.86 cfs) detached from the irrigation of 100.0 acres (1.43 cfs) of which 0.52 cfs changed to preferred use for municipal purposes for the Town of Buffalo (only to be used May 16 through September 15 of each year) and 0.34 cfs is to remain in the stream in lieu of return flow.

5 Secondary supply stored in Willow Park Reservoir, Permit No. 6408 Res. The natural flow of Clear Creek will be diverted in exchange for an equal amount of stored water released from Willow Park Reservoir. This appropriation is limited to 100.0 acre-feet and the rate of diversion and exchange is limited to 2.0 cfs.

6 Irr = Irrigation, Mun = Municipal, Dom = Domestic, Sto = Stock, Ind = Industrial cfs = cubic feet per second ac-ft = acre-feet
for such exchange and when it can be made without injury to other appropriators in both
the South Fork South Piney Creek drainage and the Clear Creek drainage. Water in the
Willow Park Reservoir is released into the South Fork South Piney Creek, then
conveyed through the Rock Creek and Piney Reservoir and Ditch Company Canal to
Rock Creek, thence down Rock Creek to Clear Creek below the City’s point of
diversion. The District Water Commissioner and Water Division Superintendent are to
be notified in advance of these diversions so a record is kept of the amount of water
diverted under this exchange. A tabulation of the Tie Hack and Willow Park storage
water rights is provided in Table 4-2.

The City also possesses two groundwater rights that are permitted for municipal
use. The Buffalo Underground Water Supply #1 (1G, 2.21 cfs) and Clear Creek #2
(42W, 1.76 cfs) have priority dates of November 26, 1947 and March 17, 1958,
respectively. According to City personnel, the wells produce water of poor quality and
are currently only used by the City for watering of the golf course and public parks.
However, there is a connection available that would allow the City to convey the
groundwater to the water treatment plant. This pipe is deteriorating and requires yearly
maintenance to the waterline.

The Buffalo Underground Water Supply #1 (1G) and Clear Creek #2 (42W) wells
are both unadjudicated water rights with the SEO as shown in Table 4-3. These water
rights could be adjudicated by filing a final proof of appropriation; the Division Water
Superintendent will then inspect the project, and the proof will be advertised. If no
protests are filed, a certificate of appropriation is issued by the Board of Control. The
certificate would then be recorded in the Johnson County Clerk’s office and at the SEO.
It is WWC’s recommendation that these water rights be adjudicated. The City’s permitted water rights are shown in Appendix A.
Table 4-2. City of Buffalo Storage Water Rights

<table>
<thead>
<tr>
<th>Permit No.</th>
<th>Facility Name</th>
<th>Appropriator</th>
<th>Priority Date</th>
<th>Status</th>
<th>Use 6</th>
<th>Outlet Works Location</th>
<th>Stream Source</th>
<th>Appropriated Amount (ac-ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9489R</td>
<td>Tie Hack Reservoir</td>
<td>City of Buffalo</td>
<td>10/18/1933</td>
<td>Adjudicated</td>
<td>Fis, Mun Rec</td>
<td>23 50N 84W</td>
<td>South Fork Clear Creek</td>
<td>1,646.67</td>
</tr>
<tr>
<td>6408R</td>
<td>Willow Park Reservoir</td>
<td>Willow Park</td>
<td>8/26/1939</td>
<td>Adjudicated</td>
<td>Dom, Irr, Sto</td>
<td>24 52N 85W</td>
<td>South Fork South Piney Creek</td>
<td>150.00</td>
</tr>
</tbody>
</table>

6Irr = Irrigation, Mun = Municipal, Dom = Domestic, Sto = Stock, Fis = Fish Propagation, Rec = Recreation  
ac-ft = acre-feet

Table 4-3. City of Buffalo Groundwater Rights

<table>
<thead>
<tr>
<th>Permit No.</th>
<th>Facility Name</th>
<th>Appropriator</th>
<th>Priority Date</th>
<th>Status</th>
<th>3Use</th>
<th>Well Location</th>
<th>Appropriated Amount (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1G</td>
<td>Buffalo Underground Water Supply #1</td>
<td>City of Buffalo</td>
<td>11/26/1947</td>
<td>Unadjudicated</td>
<td>Mun</td>
<td>6 50N 82W</td>
<td>2.21</td>
</tr>
<tr>
<td>42W</td>
<td>Clear Creek #2</td>
<td>City of Buffalo</td>
<td>3/17/1958</td>
<td>Unadjudicated</td>
<td>Mun</td>
<td>6 50N 82W</td>
<td>1.76</td>
</tr>
</tbody>
</table>

cfs = cubic feet per second
CHAPTER 5. WATER QUALITY

Introduction

The Northwest Water Supply Project will not add additional water supply sources to the City system. New water transmission infrastructure will be constructed with common and accepted engineering practices (i.e., leak detection and backflow prevention). Therefore, the Northwest Water Supply Project will not alter the City’s water quality. Public drinking water quality standards related to the Northwest Water Supply Project are governed by the EPA. The following is a summary of the water quality of the supply sources to the City and a comparison to the EPA drinking water standards.

Water Quality

The EPA drinking water regulations include two sets of water quality standards; the primary and secondary drinking water standards, which can both be found in Appendix C. The primary drinking water standards are enforceable drinking water standards that apply to all public water supplies. These standards apply to concentrations of contaminants that may affect the public’s health such as arsenic and uranium. The secondary drinking water standards are non-enforceable guidelines regulating contaminants that may cause cosmetic and/or odor effects. These regulations cover water characteristics such as total dissolved solids and color.

The City diverts water from Clear Creek drainage to the City’s water treatment plant, which uses membrane filtration and disinfection. Each year, the EPA provides the City with the allowable effluent concentrations based on the size of the population served and the type of water treatment plant in operation. These standards were not
available to include in this report as EPA and the City were both unable to located the correspondence. Per discussions with EPA and City personnel, the 2011 effluent concentration standards for the City’s water treatment plant included turbidity and chlorine residual. Raw and treated water quality and EPA standards are shown in Table 5-1.

Table 5-1. City of Buffalo Water Treatment Plant Water Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Raw Water</th>
<th>Treated Water</th>
<th>EPA Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>7.3-9.0</td>
<td>6.7-7.3</td>
<td>6.5 to 8.5(^2)</td>
</tr>
<tr>
<td>Alkalinity</td>
<td>18-32 mg/L</td>
<td>24-34 mg/L</td>
<td>---</td>
</tr>
<tr>
<td>Conductivity</td>
<td>ND</td>
<td>30-50 uS/cm</td>
<td>---</td>
</tr>
<tr>
<td>Residual Chlorine</td>
<td>ND</td>
<td>1.0 mg/L</td>
<td>&gt;0.2mg/L(^4)</td>
</tr>
<tr>
<td>Hardness</td>
<td>20-30 mg/L</td>
<td>20-30 mg/L</td>
<td>N/A</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>13-18 mg/L</td>
<td>ND</td>
<td>N/A</td>
</tr>
<tr>
<td>Turbidity</td>
<td>0.4 winter 20.0 spring run-off 2.0 average NTU's</td>
<td>0.03-0.09 NTUs 95% of the year</td>
<td>&lt;0.3 NTUs(^4)</td>
</tr>
<tr>
<td>Fluoride</td>
<td>ND</td>
<td>0.00-0.08 mg/L</td>
<td>&lt;4.0 mg/L(^1)</td>
</tr>
<tr>
<td>Sodium</td>
<td>ND</td>
<td>0.0-9.0 mg/L</td>
<td>&lt;2.0 mg/L(^2)</td>
</tr>
<tr>
<td>Temp</td>
<td>0-20 C° 32-68 F°</td>
<td>ND</td>
<td>---</td>
</tr>
<tr>
<td>Color</td>
<td>0.0-70.0</td>
<td>0.0 95% of year</td>
<td>15(^2)</td>
</tr>
</tbody>
</table>

\(^1\)National primary drinking water regulations  
\(^2\)National secondary drinking water regulations  
\(^3\)Buffalo water treatment plant PWS ID - 5600005C  
\(^4\)Required water treatment plant regulations as stated by EPA personnel (2011)

Each year, the City reports the effluent water quality of the water treatment plant to the EPA. The annual drinking water quality report provided in Appendix D provides information for the year 2009, the most recent report available at the writing of this report. The City’s water treatment plant also has raw and treated or finished water
characteristics available upon request. This data is also available in Appendix D and shown in Table 5-1. Appendix D shows that the reported turbidity in 2009 of 0.08 Nephelometric Turbidity Units (NTUs) was not a violation at the time the analysis was conducted. It should be noted that the EPA standards listed in Table 5-1 are for year 2011.

**Project Area Septic Systems**

According to City personnel and records, no City sewer infrastructure currently exists north of French Creek, in the area of the Northwest Water Supply Project. However, there is one service sewer pipeline to the County Fairgrounds. An estimated 200 residents could be serviced by the Northwest Water Supply Project. All households in the project area currently utilize onsite septic systems. These facilities are located several miles down gradient of the City’s water supply diversion. Therefore, it is very unlikely that these facilities can impact the City’s water supply. The Northwest Water Supply Pipeline will comply with WDEQ Water Quality Rules and Regulations Chapter 25 (i.e., minimum offset distances for a potable water pipe to septic systems) and Chapter 12 (i.e., watertight fittings and leakage testing).
CHAPTER 6. WATER SOURCE DATA COLLECTION

Introduction

During the course of this study, data were gathered and analyzed for all water supply sources and facilities for the City’s public water supply system in the Project Area. These data were utilized to evaluate potential impacts from the construction of the Northwest Water Supply Project on the City water supply. This section provides explanations of the locations and capacities of the water supply sources/facilities and an overview of the City’s water treatment plant.

Water Supply Sources

The City receives its raw water supply from Clear Creek and two alluvial groundwater wells. The City has water storage in two reservoirs located in the South Fork Clear Creek and South Fork South Piney Creek drainages. The water rights on South Fork South Piney Creek are utilized via previously described exchange rights thus allowing full appropriation for the raw water supply from Clear Creek. A discussion of these water supply sources and facilities follows.

Surface Water

The City’s primary source of water supply is surface water from Clear Creek. Clear Creek and South Fork South Piney Creek are perennial streams supplied by natural runoff, springs and water stored in upstream reservoirs. Surface water supply from these sources to the water treatment plant is through two diversion ditches; the Buffalo Water Wagon Pipeline & Ditch and the Old Water Treatment Plant Ditch. The Buffalo Water Wagon Pipeline & Ditch is the primary means of conveyance while the Old Water Treatment Plant Ditch is the alternate point of diversion and means of
conveyance. These facilities are permitted with the SEO and the recorded documents are provided in Appendix A.

The Buffalo Water Wagon Pipeline & Ditch has varying pipe sizes from 14-inch to 30-inch and is designed to carry a maximum capacity of 10 cfs to the hydropower plant and the water treatment plant. The Old Water Treatment Plant Ditch is a trapezoidal channel with a bottom width of approximately 10 feet, side slopes of 2H:1V and an approximate slope of 0.001 foot/foot, with a 24-inch circular headgate with an estimated capacity of 16 cfs. These values were determined during preliminary surveys of the site. Further hydraulic evaluation of the system would be required to determine a more accurate system capacity. However, since the capacity of the diversion structure is significantly greater than the City’s water rights, it is not recommended to perform further hydraulic evaluations.

The City has six additional diversion ditches historically used for supply of surface rights; however, these ditches are no longer used for supply of water for municipal use. Water appropriated to four of the six ditches (the Buffalo Mill Co. Ditch, the Pipeline Ditch, the Snider No 1 & 3 Ditch, and the Snider No 4 Ditch) has been moved to the two primary municipal diversion ditches through petitions to change the points of diversion and means of conveyance. The Carwile-Lobban Ditch is used for irrigation water for the Willow Grove Cemetery located in the City and currently is not a source for municipal use. The Enlargement of McNeese Ditch is currently permitted for domestic, stock and irrigation use and is not currently a source for municipal use for the City.
As described in Chapter 4, the Rock Creek and Piney Reservoir & Ditch Company Canal is used to transfer water from South Fork South Piney Creek to Rock Creek to be used as exchange water under Permit 23403D. Through this exchange, the source of supply for municipal use is provided by Clear Creek. Water supplied from South Fork South Piney Creek is conveyed to Clear Creek, downstream of the Water Treatment Plant via Rock Creek and the Rock Creek Ditch for irrigation supply.

**Storage Water**

The two storage facilities used for supply water to the City for municipal use are the Tie Hack and Willow Park Reservoirs. Tie Hack Reservoir has a capacity of 2,435.11 ac-ft and is entirely owned by the City. The stored water includes 1,646.67 ac-ft for municipal, recreational and fish propagation and 788.44 ac-ft dedicated to recreational use. Water is conveyed from Tie Hack Reservoir to the water treatment plant via Clear Creek.

Willow Park Reservoir has a capacity of 4,457 ac-ft, of which 150 ac-ft is owned by the City for municipal use. Municipal water from Willow Park is conveyed to Clear Creek via Rock Creek below the Water Treatment Plant. Under permit 23403D this water is exchanged for diverted upstream to the water treatment plant.

**Groundwater**

The two alluvial groundwater wells available for municipal water supply to the City are currently only used for raw water supply (i.e., watering of the City’s parks and gold course). However, the wells are connected so that if needed water could be pumped to the water treatment plant for municipal use.
The two wells are the Buffalo Underground Water Supply #1 (1G) and the Clear Creek #2 (42W), which are both located approximately ¼-mile south of the water treatment plant. The appropriated amounts for wells 1G and 42W are 990 gpm (2.21 cfs) and 790 gallons per minute (gpm) (1.76 cfs), respectively. Well 1G is a 24-inch corrugated, galvanized steel pipe that is approximately 18 feet deep. Well 42W is an 18-inch corrugated metal pipe that is approximately 25 feet deep. According to the well logs, both wells are completed in a layer of oversize boulders and gravel that begins at the surface and extends past the wells.

**Water Treatment Plant**

According to City personnel and Pall Water Processing (water treatment plant equipment supplier), the City’s water treatment plant can currently treat a maximum supply of 6.0 million gallons per day (MGD) (about 9.2 cfs). Flow data for the water treatment plant in 2009 can be found in Appendix E. The treatment capacity is limited by the micro-filter racks. Currently the system consists of 3 racks with a 2.0 MGD capacity per rack. The water treatment plant has sufficient space and infrastructure to install a fourth micro-filter rack which would boost the capacity of the water treatment plant to 8.0 MGD. The cost for installation of a fourth micro-filter rack would be $420,000, as stated by Pall Water Processing. Assuming the ancillary equipment in the water treatment plant is appropriately sized, no other system upgrades would be needed to boost the capacity to 8.0 MGD.

**Water Supply Summary**

The City’s water facilities consist of two diversion ditches permitted for municipal use with a total capacity of 26.4 cfs (17.1 MGD). In addition, two diversion ditches are
permitted for irrigation and not municipal use. The City also has stored water available for supply in the amount of 1,796.67 ac-ft. The City’s water treatment plant capacity is currently 6.0 MGD, which is meeting current needs. Additionally, research and field assessment indicate that diversion points and conveyance systems have adequate capacity to accommodate the existing water rights and needs of the City. A tabulation of the water sources and facilities for the City is found in Table 6-1. Exhibit 6-1 shows the locations of the ditches, reservoirs, wells and the City’s water treatment plant.
<table>
<thead>
<tr>
<th>Water Source</th>
<th>Facility Name</th>
<th>Permit No.</th>
<th>Ditch/Pipeline Capacity (cfs)</th>
<th>Reservoir Capacity (ac-ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Creek</td>
<td>Carwile-Lobban Ditch</td>
<td>Terr 4840</td>
<td>Irrigation Use</td>
<td></td>
</tr>
<tr>
<td>South Fork South Piney Creek</td>
<td>1Rock Creek and Piney Reservoir and Ditch Company Canal</td>
<td>23403D</td>
<td>Divert Equal Water Amount</td>
<td></td>
</tr>
<tr>
<td>Clear Creek</td>
<td>Enlargement of McNeese Ditch</td>
<td>5105E</td>
<td>Irrigation Use</td>
<td></td>
</tr>
<tr>
<td>Clear Creek</td>
<td>2Buffalo Mill Co. Ditch Pipeline Ditch</td>
<td>Terr 2126</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Snider No 1 &amp; 3 Ditch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Snider No 4 Ditch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear Creek</td>
<td>3Buffalo Water Wagon Pipeline &amp; Ditch</td>
<td>N/A</td>
<td>10.40</td>
<td>--</td>
</tr>
<tr>
<td>Clear Creek</td>
<td>Old Water Treatment Plant Ditch</td>
<td>N/A</td>
<td>16.00</td>
<td>--</td>
</tr>
<tr>
<td>Clear Creek</td>
<td>4Tie Hack Reservoir</td>
<td>9489R</td>
<td>--</td>
<td>2,435.11</td>
</tr>
<tr>
<td>South Fork South Piney Creek</td>
<td>5Willow Park Reservoir</td>
<td>6408R</td>
<td>--</td>
<td>4,457.00</td>
</tr>
<tr>
<td>Groundwater</td>
<td>Buffalo Underground Water Supply #1</td>
<td>1G</td>
<td>2.21</td>
<td>--</td>
</tr>
<tr>
<td>Groundwater</td>
<td>Clear Creek #2</td>
<td>42W</td>
<td>1.76</td>
<td>--</td>
</tr>
</tbody>
</table>

1Point of diversion is Buffalo Water Wagon Pipeline for City of Buffalo municipal use, water discharged to Rock Creek thence to Clear Creek for irrigation supply in exchange for water diverted upstream for municipal use.

2Point of diversion (POD) changed to Buffalo Water Wagon Pipeline for City of Buffalo municipal use.

3POD changed to Buffalo Water Wagon Pipeline and Ditch on permits 19276D, 23403D, Terr 4840, Terr 4841, Terr 4844, and Terr 2126 for the City of Buffalo municipal use. An alternate point of diversion is also included for the Old Water Treatment Plant Ditch.

4Permitted Capacity of 2,435.11 Ac-ft includes permits 9489R (1,646.67 ac-ft Municipal, Recreational and Fish Propagation Use) and 9700R (788.44 ac-ft Recreational Use).

5Permitted Capacity of 4,457 ac-ft includes the 150 ac-ft of capacity owned by the City of Buffalo that may be diverted by Permit 23403D through the Rock Creek and Piney Reservoir and Ditch Company Canal.

cfs = cubic feet per second
ac-ft = acre-feet
EXHIBIT 6-1

LEGEND
- Northwest Water Supply Project Area Boundary
- Water Tank
- Water Well
- Irrigation Ditches and Pipelines
- Existing Reservoir High Water Line
- Pond
- Water Treatment Plant
- Hydroelectric Plant

SCALE: 1" = 200'

RAW TEXT:

- WTP Tank
- Snider No. 1 & 3 Ditch
- Buffalo Water Wagon Pipeline & Ditch
- Snider No. 4 Ditch
- Rock Creek Ditch
- Carwile & Loban Ditches
- Enlargement of McNeese Ditch
- West Tank
- South Tank
- Willow Park Reservoir
- Tie Hack Reservoir

NORTHWEST WATER SUPPLY PROJECT AREA BOUNDARY
WATER TANK
WATER WELL
IRRIGATION DITCHES AND PIPELINES
EXISTING RESERVOIR HIGH WATER LINE
POND
WATER TREATMENT PLANT
HYDROPOWER PLANT
CHAPTER 7. RESERVED

Reserved for possible incorporation of Environmental Report
CHAPTER 8. POPULATION AND WATER DEMAND PROJECTIONS

Introduction

Population projections were performed to estimate the future water demands for the City in the Northwest Water Supply Project area which includes the extension of the water service area to the Johnson County Airport. Historical population data and projections of population growth obtained from the Economic Analysis Division of the Wyoming Department of Administration and Information (EAD/DA&I 2010) were used as the basis of the population projections. Previous population estimates by States West Water Resources Corporation (SWWRC) in 2002 and HKM Engineering (HKM) in 2008 were included for comparison. The water demand projections are based on data provided from the City’s water treatment plant and projections by HKM (2008) and SWWRC (2002). The affects of a tiered water rate structure on water demand projections in the project area were also investigated.

Anticipated City of Buffalo Population Growth

The anticipated growth rates for the City are based on previous studies completed by SWWRC (2002), HKM (2008), and EAD/DA&I (2010). The population projections were obtained using different population forecast analysis methods such as a flat rate method, an employment based method, and a cohort component method.

The population forecast by SWWRC is based on a flat 1.5% growth rate for the City, which is derived from historic past growth rates. This is a simplified approach that does not take into account population growth and decline associated with mineral development “boom/bust” conditions in Johnson County.
The study performed by HKM with the assistance of Pederson Planning Consultants was conducted with an employment-based analysis method to predict population growth. This method is applicable only for short-term (<10 years) population estimates, as it is difficult to estimate future employment opportunities on a long-term basis. The employment estimates for the City were derived from conversations with the Wyoming Business Council, review of an impact study on the anticipated mineral development in the Powder River Basin, assessment of the Dry Fork Power Station in Campbell County, and the anecdotal experience of Pederson Planning Consultants.

Finally, the methodology used for the EAD/DA&I estimates was a cohort component method based on fertility, mortality, and migration trends. This methodology involves dividing the population into cohorts (groups of varying age and sex) and then applying mortality, fertility, and migration rates to these individual groups. This method is recommended by WWC and is generally accepted as the appropriate method for estimating population growth more than 10 years in the future, as required for this study.

The three population forecast models produced different results as is shown by Table 8-1. An indicator of the differences in the analytical methods is the 2% difference in estimated population in the year 2005 and the 26% difference in estimated population in the year 2015. The 1.5% flat rate growth model by SWWRC is the low estimate and the employment-based analysis conducted by HKM is the high estimate. Therefore, the EAD/DA&I cohort component population forecast model is the average estimate and will be used for long-term modeling of population growth for northeast Wyoming’s “boom/bust” type economy.
Table 8-1. Population Growth Estimates

<table>
<thead>
<tr>
<th>Year</th>
<th>SWWRC Estimated Population</th>
<th>HKM Estimated Population</th>
<th>EAD/DA&amp;I Estimated Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>ND</td>
<td>ND</td>
<td>3,906</td>
</tr>
<tr>
<td>2001</td>
<td>ND</td>
<td>ND</td>
<td>3,953</td>
</tr>
<tr>
<td>2002</td>
<td>4,000</td>
<td>ND</td>
<td>4,073</td>
</tr>
<tr>
<td>2003</td>
<td>4,060</td>
<td>ND</td>
<td>4,181</td>
</tr>
<tr>
<td>2004</td>
<td>4,121</td>
<td>ND</td>
<td>4,194</td>
</tr>
<tr>
<td>2005</td>
<td>4,183</td>
<td>4,183</td>
<td>4,261</td>
</tr>
<tr>
<td>2006</td>
<td>4,245</td>
<td>4,234</td>
<td>4,377</td>
</tr>
<tr>
<td>2007</td>
<td>4,309</td>
<td>4,418</td>
<td>4,597</td>
</tr>
<tr>
<td>2008</td>
<td>4,374</td>
<td>4,643</td>
<td>4,703</td>
</tr>
<tr>
<td>2009</td>
<td>4,439</td>
<td>4,847</td>
<td>4,793</td>
</tr>
<tr>
<td>2010</td>
<td>4,506</td>
<td>5,037</td>
<td>4,878</td>
</tr>
<tr>
<td>2011</td>
<td>4,574</td>
<td>5,262</td>
<td>4,963</td>
</tr>
<tr>
<td>2012</td>
<td>4,642</td>
<td>5,444</td>
<td>5,048</td>
</tr>
<tr>
<td>2013</td>
<td>4,712</td>
<td>5,600</td>
<td>5,121</td>
</tr>
<tr>
<td>2014</td>
<td>4,782</td>
<td>5,931</td>
<td>5,194</td>
</tr>
<tr>
<td>2015</td>
<td>4,854</td>
<td>6,133</td>
<td>5,268</td>
</tr>
<tr>
<td>2016</td>
<td>4,927</td>
<td>6,310</td>
<td>5,336</td>
</tr>
<tr>
<td>2017</td>
<td>5,001</td>
<td>ND</td>
<td>5,415</td>
</tr>
<tr>
<td>2018</td>
<td>5,076</td>
<td>ND</td>
<td>5,488</td>
</tr>
<tr>
<td>2019</td>
<td>5,152</td>
<td>ND</td>
<td>5,567</td>
</tr>
<tr>
<td>2020</td>
<td>5,229</td>
<td>ND</td>
<td>5,640</td>
</tr>
<tr>
<td>2021</td>
<td>5,308</td>
<td>ND</td>
<td>5,702</td>
</tr>
<tr>
<td>2022</td>
<td>5,387</td>
<td>ND</td>
<td>5,765</td>
</tr>
<tr>
<td>2025</td>
<td>ND</td>
<td>ND</td>
<td>5,962</td>
</tr>
<tr>
<td>2030</td>
<td>ND</td>
<td>ND</td>
<td>6,335</td>
</tr>
</tbody>
</table>

1Town of Buffalo Water Storage Tank Level II Project (SWWRC 2002)
2City of Buffalo-Sheridan Area Water System-Lake DeSmet Level I Study (HKM 2008)
3EAD/DA&I (2010)
ND = No Data

Anticipated City of Buffalo Water Demand Projections

The City water demand projections are based on the previous studies by HKM (2008), SWWRC (2002), data provided from the City water treatment plant, City design standards, and WDEQ design standards.

The SWWRC demand values are based on a 5-day period from July 2, 2002 to July 7, 2002, during which the City water treatment plant was reportedly running at 3.5 MGD. Tank-level observations were used in conjunction with the water treatment
plant flow-rate to calculate the peak demand of 3.66 MGD for the City in 2002. The SWWRC 2002 projected population (4000) was used to calculate a per capita peak daily demand of 915 gallons.

Peak demand derived from the design standards is based on the City Ordinance for design flow requirements. To summarize Ordinance Sec. 10A-2 of the Water and Sewers Appendix, the maximum domestic daily water demand shall be based on an allowance of 375 gallons per day (gpd). The maximum daily demand is based on an area having 500 service connections or more. For a smaller number of service connections, the maximum daily demand shall be multiplied by the diversity factors presented in Table 8-2. If the number of service connections falls between the given numbers straight line interpolation shall be used.

Table 8-2. City of Buffalo Diversity Factors

<table>
<thead>
<tr>
<th>Number of Services</th>
<th>Diversity Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 or less</td>
<td>1.5</td>
</tr>
<tr>
<td>100</td>
<td>1.3</td>
</tr>
<tr>
<td>250</td>
<td>1.2</td>
</tr>
<tr>
<td>500</td>
<td>1.0</td>
</tr>
</tbody>
</table>

The WDEQ Water Quality Division Design and Construction Standards for Public Water Supplies (Chapter 12 of the Wyoming Water Quality Rules and Regulations) has additional design standards for average and maximum daily water demand. Per Section 8(a) of Chapter 12, where water use records are not available to establish water use, the equivalent per capita water use shall be at least 125 gpd and 340 gpd to size facilities for average and maximum daily water demand, respectively.
Data provided from the City water treatment plant along with the estimated population by EAD/DA&I were used to calculate the 2009 average and peak demands. These data provided from the water treatment plant are included in Appendix E. The water treatment plant maintains continual records of the influent and effluent water volume on a monthly basis. The total water volume produced for 2009 was 353.6 million gallons and the estimated population was 4,793, which gives an average daily demand of approximately 200 gallons per capita. Appendix E also shows that the peak daily water use in 2009 occurred on July 27 with an effluent production rate of 2.395 MGD. Using the 2009 population of 4,793, this equates to a per capita peak daily demand of about 500 gallons per day.

The 2009 water treatment plant data coupled with the EAD/DA&I populations provide the most current basis for estimates. Based on this method, values of 200 gallons per capita per day and 500 gallons per capita per day will be used for average daily demand and peak daily water demand, respectively. Table 8-3 shows the estimated values from the previous findings and the water treatment plant data for the peak daily demand and the average daily demand. Projected average and peak daily demand based on these per capita usage rates are provided in Table 8-4.

According to 2009 treatment plant records, the peak daily demand in the City’s ordinances (Chapter 27 - Design Flow) appears to be low at 375 gallons per day per capita when compared to actual data. It is WWC’s recommendation that the City modify the City Ordinances for a maximum day demand of 500 gallons per day per capita rather than 375 gallons per day per capita. By modifying the City ordinances, the City
Table 8-3. City of Buffalo Water Demands

<table>
<thead>
<tr>
<th>Source</th>
<th>Per Capita Average Daily Demand (gal)</th>
<th>Per Capita Peak Daily Demand (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWWRC (2002)</td>
<td>ND</td>
<td>915</td>
</tr>
<tr>
<td>HKM (2008)</td>
<td>210</td>
<td>550</td>
</tr>
<tr>
<td>City of Buffalo Design Standards (2010)</td>
<td>ND</td>
<td>375</td>
</tr>
<tr>
<td>WDEQ Design Standards (2010)</td>
<td>125</td>
<td>340</td>
</tr>
<tr>
<td>Buffalo Water Treatment Plant (2009)</td>
<td>200</td>
<td>500</td>
</tr>
</tbody>
</table>

ND = No Data
gal = gallons

Table 8-4. City of Buffalo Water Demand Projections (EAD/DA&I Estimate)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Average Day Demand (MGD)</th>
<th>Peak Day Demand (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>3,906</td>
<td>0.78</td>
<td>1.95</td>
</tr>
<tr>
<td>2001</td>
<td>3,953</td>
<td>0.79</td>
<td>1.98</td>
</tr>
<tr>
<td>2002</td>
<td>4,073</td>
<td>0.81</td>
<td>2.04</td>
</tr>
<tr>
<td>2003</td>
<td>4,181</td>
<td>0.84</td>
<td>2.09</td>
</tr>
<tr>
<td>2004</td>
<td>4,194</td>
<td>0.84</td>
<td>2.10</td>
</tr>
<tr>
<td>2005</td>
<td>4,261</td>
<td>0.85</td>
<td>2.13</td>
</tr>
<tr>
<td>2006</td>
<td>4,377</td>
<td>0.88</td>
<td>2.19</td>
</tr>
<tr>
<td>2007</td>
<td>4,597</td>
<td>0.92</td>
<td>2.30</td>
</tr>
<tr>
<td>2008</td>
<td>4,703</td>
<td>0.94</td>
<td>2.35</td>
</tr>
<tr>
<td>2009</td>
<td>4,793</td>
<td>0.96</td>
<td>2.40</td>
</tr>
<tr>
<td>2010</td>
<td>4,878</td>
<td>0.98</td>
<td>2.44</td>
</tr>
<tr>
<td>2015</td>
<td>5,268</td>
<td>1.05</td>
<td>2.63</td>
</tr>
<tr>
<td>2020</td>
<td>5,640</td>
<td>1.13</td>
<td>2.82</td>
</tr>
<tr>
<td>2025</td>
<td>5,962</td>
<td>1.19</td>
<td>2.98</td>
</tr>
<tr>
<td>2030</td>
<td>6,335</td>
<td>1.27</td>
<td>3.17</td>
</tr>
</tbody>
</table>

MGD = million gallons per day

will help prevent the future construction of inadequately sized water system components.
**City of Buffalo Water Rate Metering System**

WWC held discussions with City personnel to evaluate the existing water metering system for the City. From these discussions it was determined that the City currently uses a telemetry system for residential services, in which residential water use can be recorded remotely from a vehicle. The City operates only a few large meters that have not been replaced with the electronic reading capability. Based on this information, the City has a metering system in place that allows for water billing based on actual metered usage and no changes are recommended for the City’s metering system as a result of this review.

**Tiered Water Rate Structure Water Demand Projections**

The City currently uses a tiered water rate structure. The tiered rate structure is intended to promote water conservation by increasing the unit cost as water use increases. Residential units are charged a minimum rate of $34.09/month inside the City limits and $68.18 outside of the City limits. Multiple-unit facilities are charged a minimum rate of $34.09/month for the first unit and a reduced rate of $21.50/month for each additional unit. Mobile home parks are charged a minimum of $34.09/month for the first unit, a reduced rate of $21.05/month for each additional occupied unit and $3.50/month for each additional vacant unit. The minimum monthly charge for each individual water service entitles the owner of the unit or units to 10,000 gallons for the one month billing period and 5,000 gallons per monthly billing period for each additional unit which is part of the multi-unit facility. Base charges for higher consumption facilities (e.g., car washes, large offices, etc.) are not included. Table 8-5 provides the City’s tiered water rate schedule.
Table 8-5. City of Buffalo Tiered Water Rate Schedule

<table>
<thead>
<tr>
<th>Housing Unit</th>
<th>Minimum Monthly Water Use Charge</th>
<th>Gallons Above Entitlement/Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (City)</td>
<td>$34.09</td>
<td>Next 10,000 Gallons …. $0.40 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next 10,000 Gallons …. $0.50 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next 10,000 Gallons …. $0.60 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next 10,000 Gallons …. $0.70 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next 10,000 Gallons …. $0.95 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next 10,000 Gallons …. $1.20 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next 10,000 Gallons …. $1.35 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Next 10,000 Gallons …. $1.50 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Over 100,001 Gallons …. $1.65 per 1,000 Gallons</td>
</tr>
<tr>
<td>Residential (County)</td>
<td>$68.18</td>
<td>Next 10,000 Gallons …. $0.40 per 1,000 Gallons</td>
</tr>
<tr>
<td>Multiple Unit Facilities</td>
<td>$34.09 $21.50</td>
<td>Next 10,000 Gallons …. $0.95 per 1,000 Gallons</td>
</tr>
<tr>
<td>Mobile Home Park</td>
<td>$34.09</td>
<td>Next 10,000 Gallons …. $1.20 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td>$21.50</td>
<td>Next 10,000 Gallons …. $1.35 per 1,000 Gallons</td>
</tr>
<tr>
<td></td>
<td>$3.50</td>
<td>Over 100,001 Gallons …. $1.65 per 1,000 Gallons</td>
</tr>
</tbody>
</table>


A comparable water tier schedule, for the City of Sheridan, that increases cost with water use and includes a base charge for larger meters (higher rate users), is shown in Table 8-6. Comparison of Tables 8-5 and 8-6 indicates that Sheridan imposes a base charge on the higher rate users while Buffalo increases costs to higher use consumers. Also, in comparing Tables 8-5 and 8-6 it is apparent that Buffalo charges considerably less than Sheridan for the same water consumption. Comparing values for a homeowner inside both City limits with a 1-inch meter that uses 1,700 cubic feet (12,700 gallons) Buffalo would charge $35.17 and Sheridan would charge $42.00. For this scenario, Sheridan would charge approximately 20% more than Buffalo for the same usage.

The City of Sheridan has maintained accurate records since 2004 for water consumption and population before and after switching from a flat rate schedule to a tiered water rate schedule. Since Sheridan imposed the current water rate schedule in the spring of 2004, there have been no significant increases or decreases in per capita
Table 8-6. City of Sheridan Tiered Water Rate Schedule

<table>
<thead>
<tr>
<th>Meter Size (inches)</th>
<th>Minimum Water Use (x100 cubic ft.)</th>
<th>Tier 1 Maximum Water Use (x100 cubic ft.)</th>
<th>Bimonthly Minimum Charge Inside City</th>
<th>Charge per 100 cubic ft. Tier 1 (inside city/outside city)</th>
<th>Charge per 100 cubic ft. Tier 2 (inside city/outside city)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8</td>
<td>4.0</td>
<td>15.0</td>
<td>$28.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
<tr>
<td>3/4</td>
<td>6.0</td>
<td>22.5</td>
<td>$30.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
<tr>
<td>1</td>
<td>8.0</td>
<td>30.0</td>
<td>$33.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
<tr>
<td>1 1/2</td>
<td>16.0</td>
<td>60.0</td>
<td>$41.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
<tr>
<td>2</td>
<td>24.0</td>
<td>90.0</td>
<td>$49.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
<tr>
<td>3</td>
<td>60.0</td>
<td>225.0</td>
<td>$84.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
<tr>
<td>4</td>
<td>100.0</td>
<td>375.0</td>
<td>$124.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
<tr>
<td>6</td>
<td>200.0</td>
<td>750.0</td>
<td>$224.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
<tr>
<td>8</td>
<td>400.0</td>
<td>1500.0</td>
<td>$448.00</td>
<td>$1.00/$1.25</td>
<td>$1.38/$1.73</td>
</tr>
</tbody>
</table>

1. Imposed after crossing over minimum water use.
2. Imposed after crossing over Tier 1 maximum water use.
Source: City of Sheridan Code (2010)

water consumption. Table 8-7 shows the City of Sheridan water consumption on a bimonthly basis with average daily use per capita for years 2003 through 2006. As can be seen in Table 8-7, the per capita water consumption in Sheridan was unaffected by the tiered water rate structure change. Based on conversations with City of Sheridan personnel, the variations in water demand were more dependent on climate factors such as temperature and rainfall. Based on this limited study, the tiered water rate structures now in effect do not have a significant impact on per capita water consumption in northeastern Wyoming.

Population Growth and Water Demand in Project Area

This section discusses the projected population growth and water demand for three separate areas: existing development in the project area, proposed development in the project area, and proposed development east of Interstate-25. To determine population growth and water demand projections for these areas, average lot sizes
Table 8-7. City of Sheridan Water Consumption

<table>
<thead>
<tr>
<th>Bimonthly Period</th>
<th>Total Usage (Million Gallons)</th>
<th># of Accounts</th>
<th>Population</th>
<th>Gallons/Capita/Day</th>
<th>Gallons/Account/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan/Feb 03</td>
<td>97.7</td>
<td>6,319</td>
<td>15,798</td>
<td>103</td>
<td>258</td>
</tr>
<tr>
<td>Mar/Apr 03</td>
<td>84.7</td>
<td>6,342</td>
<td>15,855</td>
<td>89</td>
<td>223</td>
</tr>
<tr>
<td>May/June 03</td>
<td>116.7</td>
<td>6,372</td>
<td>15,930</td>
<td>122</td>
<td>305</td>
</tr>
<tr>
<td>July/Aug 03</td>
<td>323</td>
<td>6,421</td>
<td>16,053</td>
<td>335</td>
<td>838</td>
</tr>
<tr>
<td>Sept/Oct 03</td>
<td>274.7</td>
<td>6,448</td>
<td>16,120</td>
<td>284</td>
<td>710</td>
</tr>
<tr>
<td>Nov/Dec 03</td>
<td>101</td>
<td>6,427</td>
<td>16,068</td>
<td>105</td>
<td>262</td>
</tr>
<tr>
<td>Jan/Feb 04</td>
<td>95.6</td>
<td>6,421</td>
<td>16,053</td>
<td>99</td>
<td>248</td>
</tr>
<tr>
<td>Mar/Apr 04</td>
<td>87.6</td>
<td>6,437</td>
<td>16,093</td>
<td>91</td>
<td>227</td>
</tr>
<tr>
<td>May/June 04</td>
<td>171.5</td>
<td>6,495</td>
<td>16,238</td>
<td>176</td>
<td>440</td>
</tr>
<tr>
<td>July/Aug 04</td>
<td>274.5</td>
<td>6,520</td>
<td>16,300</td>
<td>281</td>
<td>702</td>
</tr>
<tr>
<td>Sept/Oct 04</td>
<td>238.8</td>
<td>6,517</td>
<td>16,293</td>
<td>244</td>
<td>611</td>
</tr>
<tr>
<td>Nov/Dec 04</td>
<td>101.7</td>
<td>6,494</td>
<td>16,235</td>
<td>104</td>
<td>261</td>
</tr>
<tr>
<td>Jan/Feb 05</td>
<td>95.3</td>
<td>6,500</td>
<td>16,250</td>
<td>98</td>
<td>244</td>
</tr>
<tr>
<td>Mar/Apr 05</td>
<td>85.4</td>
<td>6,536</td>
<td>16,340</td>
<td>87</td>
<td>218</td>
</tr>
<tr>
<td>May/June 05</td>
<td>121.9</td>
<td>6,580</td>
<td>16,450</td>
<td>124</td>
<td>309</td>
</tr>
<tr>
<td>July/Aug 05</td>
<td>247.7</td>
<td>6,608</td>
<td>16,520</td>
<td>250</td>
<td>625</td>
</tr>
<tr>
<td>Sept/Oct 05</td>
<td>241.5</td>
<td>6,613</td>
<td>16,533</td>
<td>243</td>
<td>609</td>
</tr>
<tr>
<td>Nov/Dec 05</td>
<td>104.8</td>
<td>6,597</td>
<td>16,493</td>
<td>106</td>
<td>265</td>
</tr>
<tr>
<td>Jan/Feb 06</td>
<td>90.2</td>
<td>6,546</td>
<td>16,365</td>
<td>92</td>
<td>230</td>
</tr>
<tr>
<td>Mar/Apr 06</td>
<td>87.7</td>
<td>6,626</td>
<td>16,565</td>
<td>88</td>
<td>221</td>
</tr>
<tr>
<td>May/June 06</td>
<td>145</td>
<td>6,652</td>
<td>16,630</td>
<td>145</td>
<td>363</td>
</tr>
<tr>
<td>July/Aug 06</td>
<td>347</td>
<td>6,688</td>
<td>16,720</td>
<td>346</td>
<td>865</td>
</tr>
<tr>
<td>Sept/Oct 06</td>
<td>275.6</td>
<td>6,715</td>
<td>16,788</td>
<td>274</td>
<td>684</td>
</tr>
<tr>
<td>Nov/Dec 06</td>
<td>103.5</td>
<td>6,714</td>
<td>16,785</td>
<td>103</td>
<td>257</td>
</tr>
</tbody>
</table>

Source: Final Report for the City of Buffalo - Sheridan Area Water Systems - Lake DeSmet Level I Study (2008)

were determined based upon the current lot sizes of the City, projected land use by the City and County, and projected growth area densities by the City. The projected growth area densities as reported by the City are shown in Figure 8-1.

As a comparison to the City’s projected densities, four recent subdivisions were evaluated to find current lot densities in developments near the project area. These are shown on Figure 8-2. Table 8-8 shows the four subdivisions and the average lot sizes and types of lots. Based on an the average size of the lots in these four subdivisions, the estimated lot size for future residential and commercial lots near the Northwest
Water Supply Project area are 0.45 acre and 1.20 acre, respectively. These lot sizes are somewhat smaller than the City’s projected lot size of 2.00 acres for the project area for both commercial and residential use as shown in Figure 8-1 below.

Figure 8-1: City of Buffalo Growth Area Densities

Johnson County has developed a future land use map in their Comprehensive Land Use Plan (2005). This development plan indicates that the County anticipates the City will expand west to the Mountain Ridge Subdivision, north to the Johnson County Airport, and northeast to Interstate-90. This development plan is provided as a general reference, since it was prepared as part of an investigation pertaining to Johnson
Figure 8-3: Johnson County Land Use Plan
County as a whole and the Johnson County projected community expansion is shown in Figure 8-3.

Table 8-8. Average Lot Size within Recent City of Buffalo Subdivisions

<table>
<thead>
<tr>
<th>Subdivision</th>
<th>Number of Lots</th>
<th>Subdivision Area (acres)</th>
<th>Lot Size (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo Ridge Estates (Residential)</td>
<td>48</td>
<td>30.39</td>
<td>0.63</td>
</tr>
<tr>
<td>Eagle Summit (Residential)</td>
<td>129</td>
<td>40.4</td>
<td>0.31</td>
</tr>
<tr>
<td>Fetterman Addition (Commercial)</td>
<td>7</td>
<td>4.49</td>
<td>0.64</td>
</tr>
<tr>
<td>North Bypass Addition (Commercial)</td>
<td>4</td>
<td>6.38</td>
<td>1.6</td>
</tr>
<tr>
<td>City of Buffalo^</td>
<td>--</td>
<td>--</td>
<td>2.0</td>
</tr>
</tbody>
</table>

^Value taken from City of Buffalo Growth Density Map (2010)

The City has also developed a future land use map as part of the Buffalo, Wyoming Comprehensive Plan (2007). This map is shown in Figure 8-4. In this plan the City has developed future land use estimates for portions of the project area; however, a large portion of the project area, including areas near Interstate-25 and at the base of Airport Road, were not analyzed. As such, areas from Figure 8-1 was used in conjunction with areas shown in Figure 8-4 to develop proposed development areas and future land uses for population growth and water demand projections. The two general areas evaluated for potential growth, the Northwest Water Supply Project area and a mixed use development area east of Interstate 25, are shown in Figure 8-5. The project area is further broken into nine existing development areas (including the Johnson County Airport) and three proposed development areas. The development area located east of Interstate-25 is an area where the City is currently exploring options for development.

Within the Northwest Water Supply Project area, estimated populations for the existing and proposed fully developed residential development areas are 204 and 906
Figure 8-4. City of Buffalo Projected Land Use Map

Source: Buffalo Wyoming Comprehensive Plan (2007)
residents, respectively. Existing industrial development currently consists of the Airport, and the proposed commercial and light industrial development consists of an estimated 98 lots. The development area east of Interstate 25 consists of 283 acres assumed to be a mixture of 50% residential and 50% commercial development. The total estimated population of the project area is 1,394 people when the areas northwest of the City and east of Interstate-25 are developed. Table 8-9 presents a summary of the projected population for existing and proposed developments in the project area and proposed development east of Interstate-25. This assumes that all available lots will be developed.

Table 8-9. Projected Population in the Development Areas

<table>
<thead>
<tr>
<th>Development</th>
<th>Growth Area</th>
<th>Land Use Type</th>
<th>Area (Acres)</th>
<th>Lot Density (Acres/Lot)</th>
<th>Available Lots</th>
<th>Population¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td>E1</td>
<td>Residential</td>
<td>15</td>
<td>3.0</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>Residential</td>
<td>22</td>
<td>1.8</td>
<td>12</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>E3</td>
<td>Residential</td>
<td>5</td>
<td>5.0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>E4</td>
<td>Residential</td>
<td>114</td>
<td>8.8</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>E5</td>
<td>Residential</td>
<td>29</td>
<td>4.1</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>E6</td>
<td>Residential</td>
<td>40</td>
<td>6.7</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>E7</td>
<td>Residential</td>
<td>37</td>
<td>7.4</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>E8</td>
<td>Residential</td>
<td>8.91</td>
<td>4.5</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Airport</td>
<td>Industrial</td>
<td>200</td>
<td>200.0</td>
<td>1</td>
<td>N/A</td>
</tr>
<tr>
<td>Proposed</td>
<td>P1</td>
<td>Residential</td>
<td>136</td>
<td>2.0</td>
<td>68</td>
<td>272</td>
</tr>
<tr>
<td></td>
<td>P2</td>
<td>Residential</td>
<td>134</td>
<td>1.0</td>
<td>134</td>
<td>536</td>
</tr>
<tr>
<td></td>
<td>P3²</td>
<td>Commercial/Light Industrial</td>
<td>97</td>
<td>2.0</td>
<td>49</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>P4²</td>
<td>Mixed</td>
<td>98</td>
<td>2.0</td>
<td>49</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Other East 1²</td>
<td>Mixed</td>
<td>283</td>
<td>2.0</td>
<td>142</td>
<td>284</td>
</tr>
</tbody>
</table>

| Total Population = | 1,394 |

¹Population based on four persons per water service connection in residential areas from the City of Buffalo Code (2010).
²Based on 50% residential development and 50% commercial development.

For estimating water demands for waterline distribution design, commercial, residential, and industrial demands are all used. This provides a conservative flow estimate for water distribution design. Within the Northwest Water Supply Project area,
estimated peak daily water demands for the existing and proposed development areas are 0.34 and 0.84 MGD, respectively. The proposed development area east of Interstate-25 has a projected peak daily water demand of 0.30 MGD.

For estimating water demands for a City’s water supply system (i.e., water treatment plant, water right, etc.), only residential water demands are used. Residential water demands are the only ones used because the City water demands are calculated on a per capita basis (see Tables 8-3 and 8-4). The total estimated residential peak daily water demand in the project area is 0.86 MGD when the areas northwest of the City and east of Interstate-25 are developed. Proposed residential development and residential development East of Interstate-25 would account for 0.64 MGD of this 0.86 MGD increase. Comparison of Table 8-4 and Table 8-10 shows that the Northwest Water Supply Project (existing development only) will create a 4% increase in the City’s water demand based on the 2010 water demands and use rates.
Table 8-10. Projected Water Demand in the Development Areas

<table>
<thead>
<tr>
<th>Development</th>
<th>Growth Area</th>
<th>Land Use Type</th>
<th>Available or Existing Lots</th>
<th>Average Daily Water Demand(^1) (MGD)</th>
<th>Peak Daily Water Demand(^1) (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td>E1</td>
<td>Residential</td>
<td>5</td>
<td>0.0040</td>
<td>0.0100</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>Residential</td>
<td>12</td>
<td>0.0096</td>
<td>0.0240</td>
</tr>
<tr>
<td></td>
<td>E3</td>
<td>Residential</td>
<td>1</td>
<td>0.0008</td>
<td>0.0020</td>
</tr>
<tr>
<td></td>
<td>E4</td>
<td>Residential</td>
<td>13</td>
<td>0.0104</td>
<td>0.0260</td>
</tr>
<tr>
<td></td>
<td>E5</td>
<td>Residential</td>
<td>7</td>
<td>0.0056</td>
<td>0.0140</td>
</tr>
<tr>
<td></td>
<td>E6</td>
<td>Residential</td>
<td>6</td>
<td>0.0048</td>
<td>0.0120</td>
</tr>
<tr>
<td></td>
<td>E7</td>
<td>Residential</td>
<td>5</td>
<td>0.0040</td>
<td>0.0100</td>
</tr>
<tr>
<td></td>
<td>E8</td>
<td>Residential</td>
<td>2</td>
<td>0.0016</td>
<td>0.0040</td>
</tr>
<tr>
<td></td>
<td>Airport(^2)</td>
<td>Industrial</td>
<td>--</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Total Existing Development</td>
<td></td>
<td>51</td>
<td>0.0496</td>
<td>0.1240</td>
</tr>
<tr>
<td>Proposed</td>
<td>P1</td>
<td>Residential</td>
<td>68</td>
<td>0.0544</td>
<td>0.1360</td>
</tr>
<tr>
<td></td>
<td>P2</td>
<td>Residential</td>
<td>134</td>
<td>0.1072</td>
<td>0.2680</td>
</tr>
<tr>
<td></td>
<td>P3</td>
<td>Commercial &amp; Light Industrial(^2)</td>
<td>49</td>
<td>0.0441</td>
<td>0.1103</td>
</tr>
<tr>
<td></td>
<td>Total Proposed Development</td>
<td></td>
<td>251</td>
<td>0.2057</td>
<td>0.5143</td>
</tr>
<tr>
<td>Other</td>
<td>East 1</td>
<td>Commercial(^2)</td>
<td>71</td>
<td>0.0639</td>
<td>0.1598</td>
</tr>
<tr>
<td></td>
<td>East 1</td>
<td>Residential</td>
<td>71</td>
<td>0.0568</td>
<td>0.1420</td>
</tr>
<tr>
<td></td>
<td>Total Other Development</td>
<td></td>
<td>142</td>
<td>0.1207</td>
<td>0.3018</td>
</tr>
</tbody>
</table>

\(^1\)Based on peak day water demand of 500 gpd per capita and average day water demand of 200 gpd per capita with four persons per service connection from the City of Buffalo Water Treatment Plant data and City of Buffalo Code (2010).

\(^2\)Based assumed demand of 30 gpd/employee and 30 employee average at each commercial/light industrial lot.

MGD = millions gallons per day
CHAPTER 9. CITY OF BUFFALO EXISTING WATER DISTRIBUTION SYSTEM

Introduction

In order to ensure accurate hydraulic models for various alignments for the Northwest Water Supply Project it was essential to review the City’s GIS data, WaterCAD data and infrastructure in the vicinity of the project area. Data collected during this review and infrastructure identified by City personnel, were used to inventory and evaluate the City’s GIS database and WaterCAD model to enable WWC to produce updated records of existing infrastructure in the northern margins of the City. The evaluation was also conducted to establish a list of components that presently require replacement/repair or will require replacement in the near future in the northern extents of the City.

Existing Infrastructure Inventory

In 1987, the EPA notified the City of a high potential of bacterial infection in the City’s distribution system. This notification is discussed in the WWDC (1987) report. In response to this notification, the City’s water supply system has undergone numerous upgrades including but not limited to: 1) water storage/supply tanks to assist with peak flows and fire demands; 2) water treatment facility replacement for the previous chlorination building; and 3) multiple transmission lines to "loop" the distribution system. Although many upgrades have been made, new issues arise as the City grows, the system ages, and the water distribution network has expanded and been modified. As part of this project, evaluation of the system was conducted and various components were identified as items of concern requiring upgrades.
The first item requiring upgrade is a “bottleneck” in the 10-inch water main to the wastewater treatment plant running beneath Interstate-25 and paralleling US16. This line was installed in 1982 in conjunction with the construction of the wastewater treatment plant. Since that time multiple subdivisions have been constructed east of Interstate-25 (e.g., Greenleaf Estates, Sunset Business Park, and Buffalo Commerce Center). These developments rely on this water main. With only one line servicing the subdivisions and wastewater plant, there is no method of supplying water east of I-25 in the event of system failure or during routine maintenance of the water main. The water supply options for the development of the area east of I-25 are addressed in Chapter 10.

The second area identified as needing upgrade is a concrete waterline from the South Tank to the Buffalo High School and Bus barn. According to City personnel, this waterline may be replaced in the near future dependent on the availability of state funding made available to the City through the Wyoming Association of Municipalities. If funding becomes available, the upgrade will consist of installing 3,600 feet of 18-inch PVC water mains and appurtenances. The estimated cost associated with this upgrade is $448,847. An itemized cost associated with replacement of the waterline is shown in Table 9-1. The costs for the replacement of the concrete waterline assume that the old waterline will be abandoned and left in place and a new line will be installed parallel to it. This may require minor easement acquisition. It is suggested that this upgrade be made as soon as funding is available.
### Table 9-1. Concrete Waterline Replacement Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Specifications</td>
<td>LS</td>
<td>$</td>
<td>50,000</td>
<td>1</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>Permitting and Mitigation</td>
<td>LS</td>
<td>$</td>
<td>25,000</td>
<td>1</td>
<td>$ 25,000</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
<td>$</td>
<td>10,000</td>
<td>1</td>
<td>$ 10,000</td>
</tr>
<tr>
<td>Legal Fees</td>
<td>LS</td>
<td>$</td>
<td>10,000</td>
<td>1</td>
<td>$ 10,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pre-Construction Subtotal with 15% contingency =</strong></td>
<td>$ 109,250</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobilization/Demobilization</td>
<td>LS</td>
<td>--</td>
<td>1</td>
<td></td>
<td>$ 18,850</td>
</tr>
<tr>
<td>PVC C900 18&quot; DR18</td>
<td>LF</td>
<td>$ 50</td>
<td>3,600</td>
<td>9</td>
<td>$ 211,320</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
<td>$ 3,000</td>
<td>3,000</td>
<td>2</td>
<td>$ 12,000</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
<td>$ 5,000</td>
<td>5,000</td>
<td>2</td>
<td>$ 20,000</td>
</tr>
<tr>
<td>Combination Air Valves</td>
<td>EA</td>
<td>$ 2,000</td>
<td>2,000</td>
<td>2</td>
<td>$ 8,000</td>
</tr>
<tr>
<td>Construction Engineering</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 25,132</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Construction Subtotal with 15% contingency =</strong></td>
<td>$ 339,597</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total with 15% contingency =</strong></td>
<td>$ 448,847</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LS = lump sum  
LF = liner feet  
EA = each

The City currently operates two water supply mains from the water treatment plant to the City. One is a 16-inch PVC main that is reduced to a 12-inch PVC main before it reaches the City, and the second is a 10-inch tar-wrapped steel line. The 16-inch main limiting water supply to the City according to City personnel, and the 10-inch main is in questionable condition. Currently, design and permitting is being completed to construct a new 18-inch PVC water main from the water treatment plant to the municipal limits of the City. Construction of the water main is anticipated in 2011 and the estimated cost is $1.1 million as stated in the City of Buffalo – Sheridan Area Water System – Lake DeSmet Level I Study (HKM 2008).

WWC evaluated the northern extents of the City’s water distribution network for components that are nearing their life expectancy or are deteriorating with respect to locations for potential connection points for the Northwest Water Supply Project. In the project area, most of the distribution system is either new or has been replaced since
the late 1990’s. However, it is recommended that emergency funds be set aside for unexpected system failure or damage.

The City water distribution system and potential tie points associated with the Northwest Water Supply Project are relatively new and no upgrades are currently recommended. The City has identified three water mains planned for replacement in the next 20 years.

The three water mains are: 1) a 6-inch cast iron waterline under Sunset Avenue; 2) a 12-inch ductile iron waterline under West Gatchell; and 3) a 12-inch ductile iron waterline under North Carrington. All three waterlines are nearing their life expectancy and are in need of replacement. The itemized costs for the replacement of the three waterlines is shown in Tables 9-2, 9-3, and 9-4.

Table 9-2. Sunset Avenue Waterline Replacement Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type</td>
</tr>
<tr>
<td>Final Design and Specifications</td>
<td>LS</td>
</tr>
<tr>
<td>Permitting and Mitigation</td>
<td>LS</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
</tr>
<tr>
<td>Legal Fees</td>
<td>LS</td>
</tr>
<tr>
<td>Pre-Construction Subtotal with 15% contingency =</td>
<td>$28,750</td>
</tr>
<tr>
<td>Mobilization/Demobilization</td>
<td>LS</td>
</tr>
<tr>
<td>6&quot; Cast Iron Waterline Removal</td>
<td>LF</td>
</tr>
<tr>
<td>PVC C900 12&quot; DR18</td>
<td>LF</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
</tr>
<tr>
<td>Construction Engineering</td>
<td>LS</td>
</tr>
<tr>
<td>Construction Subtotal with 15% contingency =</td>
<td>$271,067</td>
</tr>
<tr>
<td>Total with 15% contingency =</td>
<td>$299,817</td>
</tr>
</tbody>
</table>
Table 9-3. West Gatchell Street Waterline Replacement Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type</td>
</tr>
<tr>
<td>Final Design and Specifications</td>
<td>LS</td>
</tr>
<tr>
<td>Permitting and Mitigation</td>
<td>LS</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
</tr>
<tr>
<td>Legal Fees</td>
<td>LS</td>
</tr>
<tr>
<td>Pre -Construction Subtotal with 15% contingency =</td>
<td>$28,750</td>
</tr>
<tr>
<td>Mobilization/Demobilization</td>
<td>LS</td>
</tr>
<tr>
<td>12&quot; Ductile Iron Pipe Removal</td>
<td>LF</td>
</tr>
<tr>
<td>PVC C900 12&quot; DR18</td>
<td>LF</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
</tr>
<tr>
<td>Construction Engineering</td>
<td>LS</td>
</tr>
<tr>
<td>Construction Subtotal with 15% contingency =</td>
<td>$204,824</td>
</tr>
<tr>
<td>Total with 15% contingency =</td>
<td>$233,574</td>
</tr>
</tbody>
</table>

Table 9-4. North Carrington Street Waterline Replacement Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type</td>
</tr>
<tr>
<td>Final Design and Specifications</td>
<td>LS</td>
</tr>
<tr>
<td>Permitting and Mitigation</td>
<td>LS</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
</tr>
<tr>
<td>Legal Fees</td>
<td>LS</td>
</tr>
<tr>
<td>Pre -Construction Subtotal with 15% contingency =</td>
<td>$28,750</td>
</tr>
<tr>
<td>Mobilization/Demobilization</td>
<td>LS</td>
</tr>
<tr>
<td>12&quot; Ductile Iron Pipe Removal</td>
<td>LF</td>
</tr>
<tr>
<td>PVC C900 12&quot; DR18</td>
<td>LF</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
</tr>
<tr>
<td>Construction Engineering</td>
<td>LS</td>
</tr>
<tr>
<td>Construction Subtotal with 15% contingency =</td>
<td>$347,335</td>
</tr>
<tr>
<td>Total with 15% contingency =</td>
<td>$376,085</td>
</tr>
</tbody>
</table>

The elevation of the City’s water treatment plant is considerably higher than the elevation of the distribution network and therefore the distribution system has more pressure than recommended for City services. Excess system pressures are controlled by approximately 15 pressure reducing valve stations which create pressure zones supplied by three water supply tanks. Table 9-5 is a summary of the water supply
tanks. The tanks are situated so as to be able to provide a static water pressure of 40 pounds per square inch (psi) to an approximate maximum elevation of 4,848 feet, assuming all tanks are full (minimum water elevation of 4,940 feet). The entire water system inside the City’s municipal limits is below 4,848 feet elevation. Only the transmission lines to and from the water supply tanks and from the water treatment plant are above this elevation. The entire Northwest Water Supply Project area excluding the Airport is below elevation 4,848 feet. To supply adequate pressure to the airport, a County-owned secondary pressure sustaining pump or elevated storage would be required.

Table 9-5. City of Buffalo Water Supply Tank Data

<table>
<thead>
<tr>
<th>Tank</th>
<th>Capacity (gal)</th>
<th>Bottom Elevation¹ (ft)</th>
<th>Maximum Water Elevation¹ (ft)</th>
<th>Diameter¹ (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Treatment Plant</td>
<td>600,000</td>
<td>5,064</td>
<td>5,084</td>
<td>71.5</td>
</tr>
<tr>
<td>West</td>
<td>2,500,000</td>
<td>4,960</td>
<td>4,983</td>
<td>136.02</td>
</tr>
<tr>
<td>South</td>
<td>750,000</td>
<td>4,916</td>
<td>4,940</td>
<td>72.93</td>
</tr>
</tbody>
</table>

¹Values based on the City's WaterCAD model.

City of Buffalo Major Water System Components

The City’s GIS and WaterCAD data were used in conjunction with knowledge of City personnel to identify transmission lines and major components of the water distribution network (i.e., pressure relief valves, pump station, etc.) relative to the project area. During this identification, data in the City’s GIS files were updated relative to the Northwest Water Supply Project. Exhibit 9-1 shows the City’s existing water distribution network and key components and also shows which components were updated or added by WWC.
An assessment was completed on the components with respect to the Northwest Water Supply Project to evaluate the capacity of each and identify system constraints. As discussed previously, the only constraint identified is the 10-inch waterline running to the City’s wastewater treatment plant beneath I-25. However, four pressure reducing valve (PRV) stations do not have the required PRV sizes for domestic, irrigation and fire flows. All four of these stations have a 4-inch PRV for domestic flows and an 8-inch PRV for high volume flows. These PRVs are adequate to supply the required supplemental flows to the system to maintain the required pressures in the City as needed to provide fire flow. Although these stations were constructed with larger flow rate PRVs, the stations are in locations where it is likely they will only operate during fire flows or temporary use during construction, therefore no upgrades are recommended.

The waterlines proposed for upgrades and the supplemental PRV stations are shown on Figure 9-1. The Concrete Waterline, Sunset Avenue Waterline, West Gatchell Waterline and North Carrington Waterline are shown with a green line. The Supplemental PRV stations are shown as green PRV stations.

**City of Buffalo WaterCAD Model**

During the analyses of the WaterCAD model, discussions were held with City personnel to evaluate the accuracy of the model results. As discussed in Chapter 3, additional corrections were required to update the City’s WaterCAD model to include hydraulic analyses of the Northwest Water Supply Project. After completing the required updates, WWC evaluated the model and compared the results to field data from the City’s fire-flow tests shown in Appendix F. The fire-flow data in Appendix F consists of static pressure and average fire-flow test flowrate data with corresponding
Figure 9-1. City of Buffalo Future Waterline Replacement Projects

- Buffalo Water Treatment Plant
- N. Carrington
- W. Gatchell
- Concrete Waterline
- Supplemental PRV (typ)
- Sunset Ave.
residual pressure tests conducted in June of 2007. The pressure data collected is labeled static even though there is continuous flow through pipes connected to the fire hydrant because it is taken prior to conducting the fire flow test when the flow in the fire hydrant is static. This pressure is the system pressure relative to demands on the system at the time of the fire flow test. Since the pressures were recorded during the month of June and the typical peak day occurs during the month of July these data are representative of the peak day demand dynamic pressures as reported by the WaterCAD model. Exhibit 9-2 shows the WaterCAD model results for a peak day demand. The results of the WaterCAD model tabulated in Appendix G correlate within ±5% of the fire flow pressures recorded in the field and presented in Appendix F.

**Capacity of the City of Buffalo Water Distribution System**

The City’s water rights, diversion structures, water treatment plant, distribution network and projected water demands were evaluated for the addition of the Northwest Water Supply Project. It has been determined that the City’s current water distribution system can adequately support the Northwest Water Supply Project. The peak day demands for the City for the year 2010 were 2.44 MGD, which was lower than the capacity of the City’s water rights, diversion structures, and water treatment plant. Table 9-6 and Figure 9-2 show the capacity of the key components of the water distribution system. Figure 9-2 also shows the projected water demands for the Northwest Water Supply Project Area and the City in the year 2030, which still are significantly lower than the capacities of the components of the City’s water distribution system.
Table 9-6. City of Buffalo Distribution Capacity Data

<table>
<thead>
<tr>
<th>Distribution Component</th>
<th>Capacity (cfs)</th>
<th>Capacity (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Flow Municipal Water Rights Summer¹</td>
<td>11.95</td>
<td>7.72</td>
</tr>
<tr>
<td>Direct Flow Municipal Water Rights Winter³</td>
<td>10.95</td>
<td>7.08</td>
</tr>
<tr>
<td>Direct Flow Diversion Structures²</td>
<td>26.40</td>
<td>17.06</td>
</tr>
<tr>
<td>Water Treatment Plant</td>
<td>9.28</td>
<td>6.00</td>
</tr>
<tr>
<td>City of Buffalo Storage Tank Capacity³</td>
<td>N/A</td>
<td>3.85</td>
</tr>
<tr>
<td>City of Buffalo 2010 Average Day Water Demand⁴</td>
<td>1.52</td>
<td>0.98</td>
</tr>
<tr>
<td>City of Buffalo 2010 Peak Day Water Demand⁴</td>
<td>3.78</td>
<td>2.44</td>
</tr>
</tbody>
</table>

¹See Table 4-1. The values shown reflect the total appropriated amount of the water rights and do not reflect the typical water available of the water rights, depending on priority date.
²See Table 6-1 for the Buffalo Water Wagon Pipeline and Ditch and the Old Water Treatment Plant Ditch.
³See Table 9-1 for Storage Tank Data. Value in million gallons.
⁴See Table 8-4 for the City's population and water demands.
cfs = cubic feet per second
MGD = million gallons per day
Figure 9.2: Water Distribution System Capacities

Legend:
- **Blue** bars represent Water Distribution System Capacities.
- **Orange** bars represent Constructable Capacity of Buffalo Water Treatment Plant.
- **Yellow** bars represent Additional Demands From Northwest Water Supply Project.

- **Diversion Capacity**
- **Summer Months Water Rights**
- **Winter Months Water Rights**
- **Water Treatment Plant Capacity**
- **Water Storage Tank Capacity**
- **Average Day Demand**
- **Peak Day Demand**

*Note: Flowrates (MGD) are indicated on the y-axis.*
CHAPTER 10. PROPOSED BUFFALO WATER SYSTEM UPGRADES

Introduction

Multiple waterline alignments were analyzed for the Buffalo Northwest Water Supply Project. From this analysis, three options were selected for detailed hydraulic analysis and construction cost projections. These cost projections are based on optimum hydraulic characteristics and minimum easement acquisition and expense. City ordinances for design flow and pressure requirements were the governing criteria for analysis of the three options. To summarize, City ordinances Sections 10A-1, 10A-2 and 10A-3 require the water system accommodate the peak hourly demand with a minimum residual pressure of 40 psi and deliver the required fire flow plus maximum domestic daily water demand with a minimum residual pressure of 20 psi in the waterline. It is also required by City ordinances that static water pressure be not less than 40 psi and not more than 100 psi while maintaining a maximum pressure variation of 35 psi for all flow conditions (not including fire flow).

Water supply options for the development area between Interstate-25 and Interstate-90 (East Development) were also analyzed. Two potential waterline alignments were selected for evaluation for water supply to this area. Life-cycle cost analysis were also performed for the recommended option, which can be found in Chapter 12.

Northwest Water Supply Project Option 1 Waterline

Option 1 for the Northwest Water Supply Project is a 12-inch PVC waterline connecting to the Eagle Summit subdivision water supply line and following an alignment across French Creek to Airport Road as shown by Figure 10-1. This option
Figure 10.1: Option 1 Schematic

- Booster Pump
- Northwest Water Supply Project Option 1 Waterline
- Eagle Summit PRV
- Airport Service Line
- West Tank
- Bypass Waterline
- PRV-2
- FRENCH CREEK ROAD
- CANYON LANE
- AIRPORT ROAD
- EAGLE SUMMIT SUBDIVISION

1" = 1,000'
requires a bypass waterline around PRV-2 above French Creek Road and an additional pressure reducing valve (PRV) station between the connection point at Canyon Lane and the service connections in Eagle Summit. A typical schematic for the proposed PRV station is shown in Appendix H. Installation of a bypass waterline will prevent a drop in pressure from the West Tank to the Northwest Water Supply Project area for the Option 1 waterline. Water supply to the residents along Airport Road will meet the City Ordinances for pressure and flow. Although a pump station is not required for water supply to residents along Airport Road, a County-owned booster pump station will be required on the County Airport service waterline shown in Figure 10-1.

System pressures under static conditions in the Option 1 waterline range from 52.3 psi at the top of Airport Road to 126.6 psi in the bottom of French Creek. During the peak hourly demand of 175 gpm, system pressures range from 52.1 psi to 125.8 psi. Under simultaneous peak daily and fire flow conditions of 1,837.5 gpm, system pressures range from 20.3 psi to 104.6 psi. Maximum system pressures under all scenarios are in excess of 100 psi at the crossing of French Creek. Since the operating pressures are so high, service to existing or proposed development in this area will require installation of service line PRVs. Minimum system pressures occur at the waterline termination point shown on Figures 10-1 and 10-2. Because this is also the County Airport service line connection point, a booster pump will be required on the service line. The hydraulic properties of the Option 1 waterline are shown on Figure 10-2 while Table 10-1 provides the hydraulic results during design flow conditions. The estimated cost to construct the Northwest Water Supply Option 1 is $741,910. Table 10-2 provides the components required and associated costs.
Figure 10-2. Option 1 Hydraulic Profiles.
Table 10-1. Option 1 Waterline Hydraulic Results

<table>
<thead>
<tr>
<th>Flow Scenario</th>
<th>Minimum Pressure (psi)</th>
<th>Maximum Pressure (psi)</th>
<th>Total Demand (gpm)</th>
<th>Eagle Summit PRV Setting¹ (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static</td>
<td>52.3</td>
<td>126.6</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Peak Hourly</td>
<td>52.1</td>
<td>125.8</td>
<td>175.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Fire Flow + Peak Daily</td>
<td>20.3</td>
<td>104.6</td>
<td>1,837.5</td>
<td>50.0</td>
</tr>
</tbody>
</table>

¹Based on an installation elevation of 4,795 feet, which corresponds to the highest water main elevation in the Eagle Summit Subdivision.

Table 10-2. Northwest Water Supply Project Option 1 Waterline Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Bid Documents (10%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$61,000</td>
</tr>
<tr>
<td>Permitting and Mitigation (2.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$15,000</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$25,000</td>
</tr>
<tr>
<td>Pre-Construction Subtotal with 15% contingency =</td>
<td>$127,650</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobilization/Demobilization (7.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$34,090</td>
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<tr>
<td>Bypass Waterline</td>
<td>LS</td>
<td>$4,000</td>
<td>$4,000</td>
<td>1</td>
<td>$8,000</td>
</tr>
<tr>
<td>PVC C900 12&quot; DR18</td>
<td>LF</td>
<td>$27.00</td>
<td>$8.00</td>
<td>4,900</td>
<td>$171,500</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
<td>$1,544</td>
<td>$1,544</td>
<td>1</td>
<td>$3,090</td>
</tr>
<tr>
<td>French Creek Waterline Cut and Cover</td>
<td>LF</td>
<td>$75</td>
<td>$75</td>
<td>200</td>
<td>$30,000</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
<td>$1,000</td>
<td>$1,000</td>
<td>8</td>
<td>$16,000</td>
</tr>
<tr>
<td>Isolation Valves w/ Manhole</td>
<td>EA</td>
<td>$5,000</td>
<td>$5,000</td>
<td>1</td>
<td>$10,000</td>
</tr>
<tr>
<td>Blow-Off Valve</td>
<td>EA</td>
<td>$7,500</td>
<td>$7,500</td>
<td>4</td>
<td>$60,000</td>
</tr>
<tr>
<td>Combination Air Valves</td>
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<td>$6,000</td>
<td>$6,000</td>
<td>3</td>
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<tr>
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<td>Total with 15% contingency</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Northwest Water Supply Project Option 2 Waterline

Option 2 for the Northwest Water Supply Project is a single 12-inch waterline generally following the alignment of Airport Road. The proposed waterline would connect to the City’s existing infrastructure near North Main and North Buffalo Bypass and terminate near the Airport in the same location as Option 1. The Northwest Water Supply Option 2 alignment is depicted in Figure 10-3. While the Option 1 connection point is located where sufficient pressure is available to supply service to the Northwest Water Supply Project area, the Option 2 connection point is below two PRVs (PRV-2 and PRV-3) and therefore has significantly lower pressure. For this reason, Option 2 requires a booster pump station to provide adequate pressures to the Northwest Water Supply Project area. A typical booster pump station schematic is shown in Appendix H. The pump station proposed in Option 2 will be located along Airport Road and can meet the required water pressures and demands to the County Airport. Option 2 obviates the need for a booster pump to service the County Airport. However, this option will result in high pressures at lower elevations on the supply line. Therefore, service line PRVs will be required within these areas. In order to eliminate the need for these PRVs, staged pump stations were evaluated and determined to not be an economically viable option.

System pressures under static conditions in the Option 2 waterline range from 59.9 psi to 157.8 psi. During the peak hourly demand of 225 gpm, system pressures range from 52.3 psi to 157.5 psi. Under simultaneous peak daily and fire flow conditions of 1,862.5 gpm, system pressures range from 38.0 psi to 156.7 psi. The
Figure 10.3. Option 2 Schematic

- Airport Service Line
- Northwest Water Supply Project Option 2 Waterline
- Pump Station
- West Tank
- PRV-2
- PRV-3
minimum system pressures for Option 2 are just prior to the pump station located along Airport Road. Maximum system pressures under all flow conditions are in excess of 150 psi after the pump station. With this Option, service to existing or proposed development in this area would require installation of service line PRVs. The hydraulic properties of the Option 2 waterline are shown on Figure 10-4 and tabulated in Table 10-3. The flow-rate and head requirements for the pump station on Airport Road under the design flow conditions are also shown on Table 10-3. The estimated cost for the Northwest Water Supply Project Option 2 waterline is $1,084,035. Table 10-4 shows the components required and associated costs for the waterline.
Table 10-3. Option 2 Waterline Hydraulic Results

<table>
<thead>
<tr>
<th>Flow Scenario</th>
<th>Minimum Pressure Airport Line (psi)</th>
<th>Minimum Pressure (psi)</th>
<th>Maximum Pressure Airport Line (psi)</th>
<th>Total Demand (gpm)</th>
<th>Pump Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static</td>
<td>59.9</td>
<td>59.5</td>
<td>157.8</td>
<td>0.0</td>
<td>228.0</td>
</tr>
<tr>
<td>Peak Hourly</td>
<td>52.3</td>
<td>49.4</td>
<td>157.5</td>
<td>225.0</td>
<td>154.2</td>
</tr>
<tr>
<td>Fire Flow + Peak Daily</td>
<td>38.0</td>
<td>30.6</td>
<td>156.7</td>
<td>1,862.5</td>
<td>245.0</td>
</tr>
</tbody>
</table>

Table 10-4. Northwest Water Supply Project Option 2 Waterline Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Bid Documents (10%)</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 91,000</td>
</tr>
<tr>
<td>Permitting and Mitigation (2.5%)</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 23,000</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>--</td>
</tr>
<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 36,000</td>
</tr>
<tr>
<td>PVC C900 12&quot; DR18</td>
<td>LF</td>
<td>$ 27</td>
<td>$ 8</td>
<td>6,900</td>
<td>$ 241,500</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
<td>$ 1,544</td>
<td>$ 1,544</td>
<td>1</td>
<td>$ 3,090</td>
</tr>
<tr>
<td>French Creek Waterline Cut and Cover</td>
<td>LF</td>
<td>$ 75</td>
<td>$ 75</td>
<td>200</td>
<td>$ 30,000</td>
</tr>
<tr>
<td>Airport Road Pump Station</td>
<td>LS</td>
<td>$ 175,000</td>
<td>$ 125,000</td>
<td>1</td>
<td>$ 300,000</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
<td>$ 1,000</td>
<td>$ 1,000</td>
<td>3</td>
<td>$ 6,000</td>
</tr>
<tr>
<td>Isolation Valves w/ Manhole</td>
<td>EA</td>
<td>$ 5,000</td>
<td>$ 5,000</td>
<td>1</td>
<td>$ 10,000</td>
</tr>
<tr>
<td>Blow-Off Valve</td>
<td>EA</td>
<td>$ 7,500</td>
<td>$ 7,500</td>
<td>4</td>
<td>$ 60,000</td>
</tr>
<tr>
<td>Combination Air Valves</td>
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<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 67,459</td>
</tr>
</tbody>
</table>

Pre-Construction Subtotal with 15% contingency = $ 172,500

Construction Subtotal with 15% contingency = $ 911,535

Total with 15% contingency = $ 1,084,035
Northwest Water Supply Project Option 3 Waterline

Option 3 for the Northwest Water Supply Project is a combination of both Option 1 and Option 2 with two connection points. This option will incorporate the connection point and bypass line described in Option 1 near Eagle Summit subdivision and the connection point near North Main and North Buffalo Bypass. This option will allow for gravity-flow across French Creek and down Airport Road through the extent of the Northwest Water Supply Project area. This option does not require the pump station along Airport Road. Without the installation of a pump station this option does not allow for water to flow in a counterclockwise-direction and is therefore limited by a single-point of supply. To create a “looped” waterline system, water supply must be able to flow in either direction, which allows either end of the waterline to be closed for maintenance purposes while still providing water to the service area. Although Option 3 is not “looped” and is vulnerable due to a single-point of supply, it does provide wider coverage to the project area. Additionally, future upgrades, such as storage tanks or pump stations could be installed to provide redundancy. The Northwest Water Supply Option 3 alignment is depicted in Figure 10-5.

Because the Option 3 alignment bypasses two existing PRVs (PRV-2 and PRV-3), considerably higher pressures are possible at the connection point near North Main. Therefore, Option 3 will require a PRV station in the same location as the Option 2 and in lieu of the pump station on Airport Road.

The Option 3 waterline is only capable of supplying water in a clockwise-flow direction, therefore the hydraulics referred to for the Option 3 waterline are for the clockwise-flow direction only. System pressures under static conditions in the Option 3
Figure 10.5: Option 3 Schematic

Booster Pump
Northwest Water Supply Project Option 3 Waterline
Eagle Summit PRV
PRV
PRV-2
PRV-3
West Tank
Bypass Waterline
AIRPORT ROAD
NORTH MAIN ST.
FRENCH CREEK ROAD
AIRPORT ROAD
NORTH MAIN ST.
waterline range from 51.4 psi to 140.6 psi. During the peak hourly demand of 250 gpm, system pressures range from 51.1 psi to 140.3 psi. Under simultaneous peak daily and fire-flow conditions of 1,875.0 gpm, system pressures range from 21.3 psi to 110.3 psi. Minimum system pressures occur at the waterline northernmost point shown on Figures 10-5 and 10-6. Because this is also the Airport service line connection point, a booster pump will still be required on the County Airport service line. The maximum pressures associated with this option exceeded 100 psi in all scenarios at the inlet to the Airport Road PRV station. Therefore, service to existing or proposed development in this area would require installation of service line PRVs.

The hydraulic properties of the Option 3 waterline are shown on Figure 10-6 and tabulated in Table 10-5. The Northwest Water Supply Option 3 waterline estimated cost is $1,520,712. Table 10-6 shows the components required and associated costs.

Table 10-5. Option 3 Waterline Hydraulic Results Clockwise Flow

<table>
<thead>
<tr>
<th>Flow Scenario</th>
<th>Minimum Pressure (psi)</th>
<th>Maximum Pressure (psi)</th>
<th>Total Demand (gpm)</th>
<th>Eagle Summit PRV Setting¹ (psi)</th>
<th>Airport Road PRV Setting² (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static</td>
<td>51.4</td>
<td>140.6</td>
<td>0.0</td>
<td>50.0</td>
<td>48.0</td>
</tr>
<tr>
<td>Peak Hourly</td>
<td>51.1</td>
<td>140.3</td>
<td>250.0</td>
<td>50.0</td>
<td>48.0</td>
</tr>
<tr>
<td>Fire Flow + Peak Daily</td>
<td>21.3</td>
<td>110.3</td>
<td>1,875.0</td>
<td>50.0</td>
<td>48.0</td>
</tr>
</tbody>
</table>

¹Based on an installation elevation of 4,795 feet, which corresponds to the highest water main elevation in the Eagle Summit Subdivision.
²Based on an installation elevation of 4,674 feet.
### Table 10-6. Northwest Water Supply Project Option 3 Waterline Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Bid Documents (10%)</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 127,000</td>
</tr>
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<td>Permitting and Mitigation (2.5%)</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 32,000</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
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<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 51,000</td>
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</table>

Pre-Construction Subtotal with 15% contingency = $253,000

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<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
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<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilization/Demobilization (7.5%)</td>
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<td></td>
<td>$ 70,360</td>
</tr>
<tr>
<td>Bypass Waterline</td>
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<td>$ 2,500</td>
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<td>$ 5,000</td>
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<tr>
<td>Eagle Summit PRV Station</td>
<td>Ea</td>
<td>$ 80,000</td>
<td>$ 40,000</td>
<td>1</td>
<td>$ 120,000</td>
</tr>
<tr>
<td>PVC C900 12&quot; DR18</td>
<td>LF</td>
<td>$ 27</td>
<td>$ 8</td>
<td>11,800</td>
<td>$ 413,000</td>
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<tr>
<td>Water Main Connection</td>
<td>LS</td>
<td>$ 1,544</td>
<td>$ 1,544</td>
<td>2</td>
<td>$ 6,180</td>
</tr>
<tr>
<td>French Creek Waterline Cut and Cover</td>
<td>LF</td>
<td>$ 75</td>
<td>$ 75</td>
<td>400</td>
<td>$ 60,000</td>
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<td>Airport Road PRV Station</td>
<td>EA</td>
<td>$ 80,000</td>
<td>$ 40,000</td>
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<td>$ 120,000</td>
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<tr>
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<td>$ 1,000</td>
<td>13</td>
<td>$ 26,000</td>
</tr>
<tr>
<td>Isolation Valves w/ Manhole</td>
<td>EA</td>
<td>$ 5,000</td>
<td>$ 5,000</td>
<td>2</td>
<td>$ 20,000</td>
</tr>
<tr>
<td>Blow-Off Valve</td>
<td>EA</td>
<td>$ 7,500</td>
<td>$ 7,500</td>
<td>8</td>
<td>$ 120,000</td>
</tr>
<tr>
<td>Combination Air Valves</td>
<td>EA</td>
<td>$ 6,000</td>
<td>$ 6,000</td>
<td>4</td>
<td>$ 48,000</td>
</tr>
<tr>
<td>Construction Engineering (10%)</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td>$ 93,818</td>
</tr>
</tbody>
</table>

Construction Subtotal with 15% contingency = $1,267,712

Total with 15% contingency = $1,520,712
Northwest Water Supply Project Option 3 Waterline With Pump Station

Because Option 3 is restricted to a single-point of supply, this option could be improved with the installation of the pump station proposed in Option 2 to create a “looped” system. This alternative contains all of the components of Option 3 with an additional pump station on Airport Road which allows for water to flow in either a clockwise-flow direction or a counterclockwise-flow direction. Because pressure reduction would still be required when supply is provided from the connection point near Eagle Summit subdivision, the PRV would be installed parallel to the pump station. The Option 3 alternative waterline pump station and alignment are depicted in Figure 10-5a.

The hydraulic properties for the Option 3 with pump station remain the same as the original Option 3 waterline for the clockwise-flow direction and are included for this Option by reference; therefore the properties discussed for this Option 3 with pump station are for counterclockwise-flow only. System pressures under static conditions in the Option 3 with pump station range from 59.9 psi to 157.8 psi. During the peak hourly demand of 250 gpm, system pressures range from 52.2 psi to 157.8 psi. Under simultaneous peak daily and fire flow conditions of 1,875.0 gpm, system pressures range from 38.3 psi to 157.8 psi. The minimum system pressures for Option 3 with pump station occurred at the low pressure side of the pump station located along Airport Road. Maximum system pressures under all flow conditions are in excess of 150 psi at the outlet of the pump station located on Airport road. Therefore, service to existing or proposed development in this area would require installation of service line PRVs. The hydraulic properties of the Option 3 with pump station are shown on Figure 10-6 and tabulated in Table 10-5a.
Figure 10-5a. Option 3 With Pump Station Schematic

- Booster Pump
- Northwest Water Supply Project Option 3 Waterline
- Pump Station
- PRV
- West Tank
- Bypass Waterline
- Eagle Summit PRV
- PRV-2
- PRV-3
- AIRPORT ROAD
- NORTH MAIN ST.
- FRENCH CREEK ROAD

1" = 1,000'
The hydraulic properties of the Option 3 with pump station waterline are shown on Figure 10-6. Table 10-5a shows the hydraulic results during design flow conditions in the Option 3 with pump station waterline. Table 10-5a also shows the flow-rate and head provided by the pump station on Airport Road under the design flow conditions.

The Northwest Water Supply Option 3 with pump station has an estimated additional cost of $482,425 more than the estimated Option 3 waterline cost of $1,520,712 for a total of $2,002,597. Table 10-6a shows the components required and associated costs.

Table 10-5a. Option 3 Waterline Hydraulic Results Counterclockwise-Flow

<table>
<thead>
<tr>
<th>Flow Scenario</th>
<th>Minimum Pressure (psi)</th>
<th>Maximum Pressure (psi)</th>
<th>Total Demand (gpm)</th>
<th>Pump Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static</td>
<td>59.9</td>
<td>157.8</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Peak Hourly</td>
<td>52.2</td>
<td>157.8</td>
<td>250.0</td>
<td>179.2</td>
</tr>
<tr>
<td>Fire Flow + Peak Daily</td>
<td>38.1</td>
<td>157.8</td>
<td>1875.0</td>
<td>1839.6</td>
</tr>
</tbody>
</table>

Table 10-6a. Northwest Water Supply Project Option 3 Pump Station Upgrade

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type</td>
</tr>
<tr>
<td>Final Design and Bid Documents (10%)</td>
<td>LS</td>
</tr>
<tr>
<td>Permitting and Mitigation (2.5%)</td>
<td>LS</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
</tr>
<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
</tr>
<tr>
<td>Pre -Construction Subtotal with 15% contingency</td>
<td></td>
</tr>
<tr>
<td>Mobilization/Demobilization (7.5%)</td>
<td>LS</td>
</tr>
<tr>
<td>Airport Road Pump Station</td>
<td>LS</td>
</tr>
<tr>
<td>Construction Engineering (10%)</td>
<td>LS</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Subtotal with 15% contingency = $482,425
Figure 10-6. Option 3 Hydraulic Profiles.

OPTION 3 COUNTER-CLOCKWISE HYDRAULIC PROFILE

LEGEND
- **EXISTING GROUND PROFILE**
- **PEAK DAY AND FIRE FLOW ENERGY GRADE LINE**
- **PEAK HOUR ENERGY GRADE LINE**
- **STATIC CONDITIONS ENERGY GRADE LINE**
- **WATERLINE PROFILE**

SCALE: HORZ. 1" = 1000', VERT. 1" = 200'

**BLOW-OFF VALVE**
**ISOLATION VALVE WITH BLOW-OFF**
**ISOLATION VALVE**
**PRV STATION**
**PUMP STATION**
**COMBINATION AIR VALVE**
Water Supply Tank

As an optional system addition to the Northwest Water Supply Project, a water storage tank is proposed at the high point of Airport Road. A typical schematic for an aboveground steel potable water storage tank is shown in Appendix H. This water tank would supply the residents along Airport Road, the County Airport, and the East Development area with consistent water pressures and also provide fire protection. In addition, the water tank would allow for installation of smaller diameter waterlines in the Northwest Water Supply Project options and provide redundant water supplies. Although the decrease in waterline sizes would reduce costs in the Northwest Water Supply Project options, the material cost savings will only offset about 20% of the cost of the proposed water storage tank. The water storage tank would increase the life of the Airport Road pump station and provide backup supply, further reducing the need for the pump station. Additionally it is estimated that the Option 2 pump station life expectancy will increase by approximately 70%. With the installation of the storage tank, the pump station will no longer be in constant operation and instead would cycle to maintain a water elevation range in the tank. The estimated costs for a 500,000-gallon or a 1,000,000-gallon storage tanks are $785,287 and $1,563,296, respectively. Tables 10-7 and 10-8 provide costs for construction of the tanks. The proposed location for the water supply tank is shown in Figure 10-7.
Table 10-7. 500,000 Gallon Storage Tank Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Bid Documents (2.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$18,000</td>
</tr>
<tr>
<td>Permitting and Mitigation (2.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$18,000</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$28,000</td>
</tr>
<tr>
<td>Pre-Construction Subtotal with 15% contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$85,100</td>
</tr>
<tr>
<td>Mobilization/Demobilization (7.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$38,860</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
<td>$1,544</td>
<td>$1,544</td>
<td>2</td>
<td>$6,180</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
<td>$1,000</td>
<td>$1,000</td>
<td>4</td>
<td>$8,000</td>
</tr>
<tr>
<td>Water Tank PRV</td>
<td>EA</td>
<td>$14,500</td>
<td>$14,500</td>
<td>1</td>
<td>$29,000</td>
</tr>
<tr>
<td>Water Tank</td>
<td>LS</td>
<td>$475,000</td>
<td></td>
<td>1</td>
<td>$475,000</td>
</tr>
<tr>
<td>Construction Engineering (10%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$51,818</td>
</tr>
<tr>
<td>Construction Subtotal with 15% contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$700,187</td>
</tr>
<tr>
<td>Total with 15% contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$785,287</td>
</tr>
</tbody>
</table>

Table 10-8. 1,000,000 Gallon Storage Tank Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Bid Documents (2.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$35,000</td>
</tr>
<tr>
<td>Permitting and Mitigation (2.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$35,000</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$56,000</td>
</tr>
<tr>
<td>Pre-Construction Subtotal with 15% contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$156,400</td>
</tr>
<tr>
<td>Mobilization/Demobilization (7.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$78,090</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
<td>$1,544</td>
<td>$1,544</td>
<td>2</td>
<td>$6,180</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
<td>$1,000</td>
<td>$1,000</td>
<td>4</td>
<td>$8,000</td>
</tr>
<tr>
<td>Water Tank PRV</td>
<td>EA</td>
<td>$14,500</td>
<td>$14,500</td>
<td>1</td>
<td>$29,000</td>
</tr>
<tr>
<td>Water Tank</td>
<td>LS</td>
<td>$1,162,000</td>
<td></td>
<td>1</td>
<td>$998,000</td>
</tr>
<tr>
<td>Construction Engineering (10%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$104,118</td>
</tr>
<tr>
<td>Construction Subtotal with 15% contingency</td>
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<td></td>
<td></td>
<td></td>
<td>$1,406,896</td>
</tr>
<tr>
<td>Total with 15% contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,563,296</td>
</tr>
</tbody>
</table>
Figure 10.7: Proposed Water Storage Tank.
Development Between Interstate-25 and Interstate-90

The City is investigating water supply options for the East Development area. This development was previously addressed in Chapter 8 with discussion pertaining to development area and type, population growth and water demands. WWC has evaluated various potential water supply alignment options for this area and proposes two options based on minimum easement acquisition, optimum hydraulic characteristics, and cost.

East Development Option A Waterline

The first option (Option A) for water supply to the East Development area incorporates the Northwest Water Supply Project Option 3 and assumes construction of Option A after or simultaneously with Option 3. Option A would use the capacity of the Northwest Water Supply Project Option 3 waterline to convey water from the City to the East Development area. By using the combined capacity of the existing water distribution system to the County Fairgrounds and the Northwest Water Supply Project Option 3 waterline a 12-inch PVC waterline could provide required design flows and pressures to the East Development. The Option A waterline would be connecting two separate pressure zones, which are separated by a PRV located on East Hart Street. To maintain the separate pressure zones a PRV station will be required on the Option A waterline. Figure 10-8 provides a schematic of the Option A waterline in conjunction with Option 3.

System pressures under static conditions in the Option A waterline range from 42.9 psi to 82.5 psi. During the peak hourly demand of 591.7 gpm, system pressures range from 42.9 psi to 73.7 psi. Under simultaneous peak daily and fire flow conditions
Figure 10-8: Option A East Development Waterline

- Airport Service Line
- Booster Pump
- Northwest Water Supply Project Option 3 Waterline
- Pump Station
- PRV
- West Tank
- East Development Option A Waterline
- Northwest Water Supply Project Option 3 Waterline
- INTERSTATE 90
- INTERSTATE 25
of 2,045.8 gpm, system pressures range from 42.9 psi to 69.9 psi. The minimum system pressures for Option A occur at the connection point to the Option 3 waterline located on Airport Road. The maximum system pressures under all scenarios occur at the inlet of the Option A PRV station shown in Figure 10-8. The hydraulic properties of the Option A waterline are shown on Figure 10-9 and tabulated in Table 10-9. The maximum pressures in the Option A waterline are less than 100 psi in all conditions, therefore additional PRVs will not be required on the service lines in the East Development area. The East Development Option A estimated cost is $675,772. Table 10-10 shows the components required and associated costs.

Table 10-9. East Development Option A Waterline Hydraulic Results Clockwise-Flow in Northwest Water Supply Project

<table>
<thead>
<tr>
<th>Flow Scenario</th>
<th>Minimum Pressure (psi)</th>
<th>Maximum Pressure (psi)</th>
<th>Total Demand (gpm)</th>
<th>Eagle Summit PRV Setting(^1) (psi)</th>
<th>Airport Road PRV Setting(^2) (psi)</th>
<th>East Development PRV Setting(^3) (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static</td>
<td>42.9</td>
<td>82.5</td>
<td>0.0</td>
<td>50.0</td>
<td>48.0</td>
<td>42.1</td>
</tr>
<tr>
<td>Peak Hourly</td>
<td>42.9</td>
<td>73.7</td>
<td>591.7</td>
<td>50.0</td>
<td>48.0</td>
<td>42.1</td>
</tr>
<tr>
<td>Fire Flow + Peak Daily</td>
<td>42.9</td>
<td>69.9</td>
<td>2045.8</td>
<td>50.0</td>
<td>48.0</td>
<td>42.1</td>
</tr>
</tbody>
</table>

\(^1\) Based on an installation elevation of 4,795', which corresponds to the highest water main elevation in the Eagle Summit Subdivision.

\(^2\) Based on an installation elevation of 4,674'.

\(^3\) Based on an installation elevation of 4,608'.
Figure 10-9. Option A Hydraulic Profiles.
Table 10-10. East Development Option A Waterline Upgrade Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Bid Documents (10%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$56,000</td>
</tr>
<tr>
<td>Permitting and Mitigation (2.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$14,000</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td></td>
<td>$22,000</td>
</tr>
<tr>
<td>Pre-Construction Subtotal with 15% contingency=</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Mobilization/Demobilization (7.5%)</td>
<td>LS</td>
<td></td>
<td>--</td>
<td></td>
<td>$33,880</td>
</tr>
<tr>
<td>PVC C900 12&quot; DR18</td>
<td>LF</td>
<td>$27.00</td>
<td>$8.00</td>
<td>7,300</td>
<td>$255,500</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
<td>$1,544</td>
<td>$1,544</td>
<td>2</td>
<td>$6,180</td>
</tr>
<tr>
<td>Road Waterline Bore</td>
<td>LS</td>
<td>$12,500</td>
<td>$12,500</td>
<td>1</td>
<td>$25,000</td>
</tr>
<tr>
<td>PRV Station</td>
<td>EA</td>
<td>$80,000</td>
<td>$40,000</td>
<td>1</td>
<td>$120,000</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
<td>$1,000</td>
<td>$1,000</td>
<td>2</td>
<td>$4,000</td>
</tr>
<tr>
<td>Construction Engineering (10%)</td>
<td>LS</td>
<td></td>
<td>--</td>
<td></td>
<td>$41,068</td>
</tr>
<tr>
<td>Construction Subtotal with 15% contingency=</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Total with 15% contingency=</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$675,772</td>
</tr>
</tbody>
</table>

East Development Option B Waterline

A second option (Option B) for a water supply line to the East Development area assumes no development of the Northwest Water Supply Project. This option would require that multiple lines be installed to provide the required design capacity and pressures to the transmission line crossing beneath Interstate-25. This option includes the 8-inch supply waterline from the County Fairgrounds, one additional 8-inch supply waterline along Kings Lane, and one additional 12-inch supply waterline from East Hart Street. The Option B waterline will connect two pressure zones, which are separated by a PRV located on East Hart Street. To maintain the separate pressure zones, a PRV station will be required on the Option B waterline also. Figure 10-10 provides a schematic of the Option B waterline.

System pressures under static conditions in the Option B waterline range from 51.5 psi to 97.2 psi. During the peak hourly demand of 591.7 gpm, system pressures range from 51.5 psi to 84.6 psi. Under simultaneous peak daily and fire-flow conditions
of 2,045.8 gpm, system pressures range from 51.5 psi to 60.8 psi. The minimum system pressures for Option A occurred outlet of the Option B PRV station shown in Figure 10-10. The maximum system pressures under all scenarios occurred on the 12-inch supply line from East Hart Street. The hydraulic properties of the Option B waterline are shown on Figure 10-11, and tabulated in Table 10-11. The maximum pressures in the Option A waterline are less than 100 psi in all scenarios, therefore additional PRVs will not be required on the service lines in the East Development area. The East Development Option B estimated cost is $1,115,075. Table 10-12 shows the components required and associated costs.
Figure 10-10, Option B East Development Waterline

- Kings Lane Supply Waterline
- County Fairgrounds Supply Waterline
- East Development Option B Waterline
- East Hart Street Supply Waterline

Legend:
- PRV

Scale: 1" = 1,000'
Figure 10-11. Option B Hydraulic Profiles.
Table 10-11. Option B Waterline Hydraulic Results

<table>
<thead>
<tr>
<th>Flow Scenario</th>
<th>Minimum Pressure (psi)</th>
<th>Maximum Pressure (psi)</th>
<th>Total Demand (gpm)</th>
<th>East Development PRV Setting* (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static</td>
<td>51.5</td>
<td>97.2</td>
<td>0.0</td>
<td>51.5</td>
</tr>
<tr>
<td>Peak Hourly</td>
<td>51.5</td>
<td>84.6</td>
<td>713.6</td>
<td>51.5</td>
</tr>
<tr>
<td>Fire Flow + Peak Daily</td>
<td>51.5</td>
<td>60.8</td>
<td>2,167.7</td>
<td>51.5</td>
</tr>
</tbody>
</table>

*Based on an installation elevation of 4,586'.

Table 10-12. East Development Option B Waterline Upgrade Components and Costs

<table>
<thead>
<tr>
<th>Construction Item</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Bid Documents (10%)</td>
<td>LS</td>
<td>--</td>
<td>$</td>
<td>$93,000</td>
<td>$93,000</td>
</tr>
<tr>
<td>Permitting and Mitigation (2.5%)</td>
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<td>--</td>
<td>$</td>
<td>$23,000</td>
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</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
<td>--</td>
<td>$</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
<td>--</td>
<td>$</td>
<td>$37,000</td>
<td>$37,000</td>
</tr>
<tr>
<td>Pre-Construction Subtotal with 15% contingency =</td>
<td>$187,450</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobilization/Demobilization (7.5%)</td>
<td>LS</td>
<td>--</td>
<td>$</td>
<td>$51,870</td>
<td>$51,870</td>
</tr>
<tr>
<td>French Creek Waterline Cut and Cover</td>
<td>LF</td>
<td>$75</td>
<td>$75</td>
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<td>$60,000</td>
</tr>
<tr>
<td>PVC C900 8&quot; DR18</td>
<td>LF</td>
<td>$13</td>
<td>$7</td>
<td>$48,000</td>
<td>$48,000</td>
</tr>
<tr>
<td>PVC C900 12&quot; DR18</td>
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<td>$27</td>
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<td>LF</td>
<td>$50</td>
<td>$9</td>
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<tr>
<td>Water Main Connection</td>
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<td>$1,544</td>
<td>$1,544</td>
<td>$9,260</td>
<td>$9,260</td>
</tr>
<tr>
<td>PRV Station</td>
<td>EA</td>
<td>$80,000</td>
<td>$40,000</td>
<td>$120,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>18&quot; Water Main Connection</td>
<td>EA</td>
<td>$3,000</td>
<td>$3,000</td>
<td>$6,000</td>
<td>$6,000</td>
</tr>
<tr>
<td>18&quot; Isolation Valves</td>
<td>EA</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>18&quot; Isolation Valves w/ Manhole</td>
<td>EA</td>
<td>$9,000</td>
<td>$9,000</td>
<td>$18,000</td>
<td>$18,000</td>
</tr>
<tr>
<td>18&quot; Blow-Off Valve</td>
<td>EA</td>
<td>$11,500</td>
<td>$11,500</td>
<td>$23,000</td>
<td>$23,000</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$16,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>Isolation Valves w/ Manhole</td>
<td>EA</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Blow-Off Valve</td>
<td>EA</td>
<td>$7,500</td>
<td>$7,500</td>
<td>$60,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Combination Air Valves</td>
<td>EA</td>
<td>$6,000</td>
<td>$6,000</td>
<td>$12,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>Construction Engineering (10%)</td>
<td>LS</td>
<td>--</td>
<td>$</td>
<td>$63,160</td>
<td>$63,160</td>
</tr>
<tr>
<td>Construction Subtotal with 15% contingency =</td>
<td>$927,625</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total with 15% contingency =</td>
<td>$1,115,075</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 11. PRIORITIZATION AND RECOMMENDATIONS

Introduction

The nonstructural and structural recommendations discussed in this report have been prioritized for consideration. The nonstructural recommendations consist of updates to the City ordinances, alternate investment options, and updating or replacing the WaterCAD model. Structural recommendations include the Northwest Water Supply Project, East Development Area and various waterline replacements. In addition, recommendations are provided for options related to the Northwest Water Supply Project and East Development Area.

Prioritization

Nonstructural Recommendations

Recommendations for improvements to the City’s operation of the water distribution system have been made in various chapters of the Northwest Water Supply Project study. These are as follows:

Evaluation of the City’s water demands (Chapter 8) showed that design standards are significantly lower than the actual 2009 per capita water usage for the City. Currently the City’s maximum design flow (peak daily demand) is 375 gallons per day per capita. As shown in Chapter 8, the actual peak use in 2009 was approximately 500 gallons per day per capita. Based on this information, it is recommended that City Ordinance Section 10A-2 Design Flow be updated to standards more representative of actual usage.

The City’s current Water Debt/Operation Accounts are earning a very low interest rate as discussed in Chapter 12. Currently, the City’s water accounts are earning
0.21%, which amounts to $9,230 annually. Funding programs exist that would allow the City to realize higher interest rates on their Water Debt/Operations Accounts. A recommendation is provided in Chapter 12 for an alternate investment for the City’s Water Accounts.

The City’s WaterCAD model is discussed in Chapters 3 and 9. The City’s model has several core inaccuracies (e.g., infrastructure location, scale and spatial reference), which make it difficult to evaluate supply and distribution waterlines in the City. It is recommended that the City update and improve the model to address these issues.

**Structural Replacement Recommendations**

As discussed previously in Chapter 9, four areas have been identified for infrastructure improvements in the next twenty years in the City: the Sunset Avenue waterline replacement, the West Gatchell Street waterline replacement, the North Carrington Street waterline replacement, and the concrete waterline replacement from the South Tank to the High School. Other areas were identified for potential upgrades (waterline from water treatment plant to City limits and bottleneck under I-25), however, these areas are addressed in other recommendations in this report, or needed upgrades are currently underway. The following is a summary of the prioritization of the areas needing improvements and the water supply options investigated in the Northwest Water Supply Project.

The prioritization criteria for the structural replacement recommendations are based on a Ranking Criteria Equation (RCE).
RCE = Lifespan Adjustment X
Volume Index X Cost Variables

The RCE incorporates three factors: 1) lifespan adjustment: age of water line as percent of estimated lifespan; 2) volume index: number of residences/businesses impacted by failure of the waterline; and 3) cost variable: comparative replacement cost of all improvements evaluated for ranking. These three factors are used to compute an RCE to determine a final prioritization. The higher the RCE value the higher the improvement priority.

The four waterlines scheduled for replacement consist of various pipe material products (concrete, ductile iron and cast iron). In order to rank replacement scheduling of waterlines, an approximate lifespan was estimated for each material type. In order to better plan for future waterline replacements a method was implemented to estimate the expected lifespans of various pipe materials. Life expectancies were further evaluated to estimate three separate survival percentages of the pipe material: 100% survival, 50% survival, and 10% survival. For example, it is estimated that 100% of cast iron pipe will survive 50 years, 50% will survive 80 years, and 10% will survive 120 years. Based on this evaluation conservative lifespans estimated for cast iron (50 years), concrete (85 years), and ductile iron (60 years). The age of the waterline was then used to determine the approximate percentage of life expired for the waterline, which is then divided by ten [material lifespan – age /((material lifespan*10))] for use in the RCE.

The second factor in the RCE is the number of residences/businesses affected by failure of the waterline. Three of the four waterlines are distribution waterlines. Based on evaluation of the City development and lot spacing, it is estimated that a City block accommodates an average of 10 residences, businesses, or a combination
thereof. The number of residences/businesses affected by the loss of the distribution waterlines is calculated by establishing the number of City blocks supplied by the waterline multiplied by ten residences/businesses per block. Because each water line will generally service half of the block, this number is then divided by two. This value is referred to as the volume index in the following tables. Based on the quantity of the volume index in this application, the total number of residences/businesses affected for each waterline was scaled down by a factor of 10 in the RCE in order to adjust the RCE factors to the same magnitude.

One of the structural replacement waterlines is a supply waterline from the South Tank. In the event of a failure of the supply waterline other waterlines in the City would be available for domestic water distribution; however, the area of the City south of Clear Creek would lack adequate fire protection. Therefore, the supply waterline was evaluated under the same criteria. The number of residences/businesses affected by failure of the supply waterline is determined by the number of City blocks south of Clear Creek multiplied by ten residences/businesses per block.

Waterline replacement cost is the final variable in the RCE. To compare the improvements, it is assumed that the City only has sufficient funds to replace the most costly improvement. However, to warrant use of the entire funds available the more expensive upgrades must be justified by the other variables. Therefore, the cost variable of the RCE is established by dividing the available funding (most costly upgrade) by the replacement for each recommendation. Table 11-1 shows the RCE for the four waterlines and the prioritization of the waterlines.
Table 11-1. Priority Schedule Structural Improvements

<table>
<thead>
<tr>
<th>Structural Replacement Recommendation</th>
<th>Installation Year</th>
<th>% of Lifespan Expired</th>
<th>Affected Residences/ Businesses</th>
<th>Replacement Cost</th>
<th>RCE</th>
<th>Affected Residences/ Businesses</th>
<th>Cost</th>
<th>Calculated RCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Waterline</td>
<td>1975</td>
<td>42%</td>
<td>600</td>
<td>$448,800</td>
<td>4.2</td>
<td>0</td>
<td>1.0</td>
<td>254</td>
</tr>
<tr>
<td>Sunset Ave.</td>
<td>1948</td>
<td>100%</td>
<td>50</td>
<td>$299,800</td>
<td>10.0</td>
<td>5</td>
<td>1.5</td>
<td>75</td>
</tr>
<tr>
<td>N. Carrington</td>
<td>1973</td>
<td>74%</td>
<td>90</td>
<td>$376,100</td>
<td>7.4</td>
<td>9</td>
<td>1.2</td>
<td>80</td>
</tr>
<tr>
<td>W. Gatchell</td>
<td>1973</td>
<td>74%</td>
<td>40</td>
<td>$233,600</td>
<td>7.4</td>
<td>4</td>
<td>1.9</td>
<td>57</td>
</tr>
</tbody>
</table>

Structural Improvement Recommendations

Two separate areas were identified for recommended structural improvements to the City’s water supply/distribution system: 1) the Northwest Water Supply Project, and 2) the East Development Area. The following is the development of the recommended option in both cases and the prioritization of the two separate structural improvements.

The Northwest Water Supply Project has four separate options discussed in Chapter 10. The recommended option was determined based on a modified Ranking Criteria Method. Because each option proposes new infrastructure, the variable applied for aging is neglected. The RCE is derived from the following variables: 1) volume index: number of households supplied and 2) cost. Therefore the RCE was modified to RCE = Volume Index X Cost Variable.

Based on the quantity of the volume index in this application the total number of households affected was scaled down by a factor of 10. By doing this both the volume index and cost variable were of the same magnitude. Again, the cost variable is determined by dividing the available funds (most expensive option) by the cost of each option. The RCE for the Northwest Water Supply Project Options is shown in Table 11-2.
Table 11-2. Northwest Water Supply Project Recommended Option

<table>
<thead>
<tr>
<th>Structural Improvement Recommendation</th>
<th>Affected Residences/ Businesses</th>
<th>Cost</th>
<th>Affected Residences/ Businesses</th>
<th>Cost</th>
<th>Calculated RCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 2</td>
<td>46</td>
<td>$1,084,000</td>
<td>4.6</td>
<td>1.8</td>
<td>8.5</td>
</tr>
<tr>
<td>Option 3</td>
<td>52</td>
<td>$1,520,700</td>
<td>5.2</td>
<td>1.3</td>
<td>6.8</td>
</tr>
<tr>
<td>Option 3/w Pump Station</td>
<td>52</td>
<td>$2,003,100</td>
<td>5.2</td>
<td>1.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Option 1</td>
<td>22</td>
<td>$741,900</td>
<td>2.2</td>
<td>2.7</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Although the Option 2 waterline has the highest RCE value, the Option 3 waterline would result in future cost savings to the City of approximately $439,300. These savings are from the East Development waterline construction. The future cost savings created by the Option 3 waterline warrant a new RCE cost value, which would be determined by subtracting the future cost savings from the construction cost. The new RCE Cost value would be 1.9, which would result in a calculated RCE of 9.9. Therefore the recommended option for the Northwest Water Supply Project is Option 3.

The East Development is comprised of two options discussed in Chapter 10. The RCE was not used for the East Development options for two reasons: 1) both waterlines fix the current bottleneck problem under I-25, and 2) both options supply the entire East Development area. Therefore, the only ranking criteria used for the East Development is the construction cost. The construction cost of Option A is $675,770 and the construction cost of Option B is $1,115,070. Since both options accomplish the same goals, the East Development recommendation is Option A.

It should be noted that the East Development Option A waterline ties to the Northwest Water Supply Project Option 3 waterline; therefore the East Development
Option A waterline must wait to be constructed until the Northwest Water Supply Project Option 3 waterline is constructed.

**Proposed Water Storage Tank Recommendations**

As specified by WDEQ Rules and Regulations Chapter 12, Section 13, a tank shall be sized such that it will provide clearwell and system storage capacity equal to 25% of the design maximum daily demand, plus added fire storage based on recommendations established by the State Fire Marshall. These recommendations also determined that the Airport was not of sufficient size to warrant increased fire-flow demand (~1,300 gpm required fire-flow for the Airport) as specified in the City’s ordinances Chapter 27 Section 10A-2. Based on this determination and the required fire-flow duration of two hours, a fire-flow volume was determined for commercial development and is provided in Table 10-9. The 25% capacity for design maximum daily demand is based on complete development of the Northwest Water Supply Project existing and potential growth areas and also the East Development area being completely developed. Under these assumptions, the required capacity of the water storage tank is 384,250 gallons as shown in Table 11-3. As shown in Table 10-9 the 500,000-gallon storage tank would provide adequate storage for the proposed development areas in the Northwest Water Supply Project area.

Table 11-3. Proposed Water Storage Tank Required Capacity

<table>
<thead>
<tr>
<th>Capacity Component</th>
<th>Demand</th>
<th>Units</th>
<th>Capacity (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% Maximum Daily Demand</td>
<td>500 gpd/capita</td>
<td>1394 Persons¹</td>
<td>174,250</td>
</tr>
<tr>
<td>Fire-Flow Demand</td>
<td>1,750 gpm</td>
<td>2-Hours</td>
<td>210,000</td>
</tr>
<tr>
<td>Required Capacity =</td>
<td></td>
<td></td>
<td>384,250</td>
</tr>
</tbody>
</table>

¹See Table 8-9 for explanation of value.
gpd/capita = gallons per day per capita
CHAPTER 12. WATER SYSTEMS FINANCING

Introduction

As discussed in the previous chapters, various upgrades and improvements to the City’s water distribution system are proposed including: the concrete line south of the City; the bottleneck under I-25; the Northwest Water Supply Project; the development area East of I-25; and a potable water storage tank. The costs of the projects are discussed in the previous chapters. In order to construct these water projects the City will be required to obtain funding from outside sources and to set aside funds for future construction projects. The following is a summary of the financing programs available to the City for the water projects and the City’s current and proposed water revenue and costs.

Financing Sources

Many financing programs are available to the City for the various projects that are currently being considered. The City may apply to several programs for a specific project. Brief descriptions for each of these funding programs are contained in the following paragraphs and are followed by a summary table.

Wyoming Water Development Commission (WWDC)

WWDC provides funding through loans and grants by a defined set of criteria for projects associated with water development, storage, and transmission. Appendix I contains the WWDC operating criteria, and a summary of the criteria is contained herein. WWDC has three development programs: 1) new development; 2) rehabilitation; and 3) dam and reservoir projects. A prospective project must fall under one of these programs to qualify for funding. The new development program is for
previously unused or undeveloped waters of Wyoming and provides an opportunity for
the applicants to develop water supplies for anticipated future needs to insure that lack
of water supply will not inhibit economic growth. The rehabilitation program is to provide
funding assistance for the improvement of water projects that have been completed and
in use for at least 15 years. The dam and reservoir program is to provide funding for
proposed reservoirs with capacity over 2,000 ac-ft or expansion of existing reservoirs
with capacity over 1,000 ac-ft. WWDC also imposes priorities on the various water
projects to utilize available program funds effectively and efficiently. A priority list is
contained in Appendix I. As noted in the priority list for water supply systems,
distribution systems are not included in this category and are not eligible for funding.
Therefore, although WWDC would be a funding source for the Northwest Water Supply
Project and a future storage tank project, WWDC would not be a source of funding for
the East Development Waterline or the special improvement districts associated with
the Northwest Water Supply Project. Proposed projects are separated into three levels
of project development by WWDC and they include:

- Level I projects are typically preliminary analysis and comparison of
development alternatives,

- Level II projects have three separate phases in the case of the dam and
  reservoir program or two phases in all other cases, which are to address
  the project feasibility and to refine the project status as necessary for a
  Level III funding request, and

- Level III projects are typically final design and construction of projects.

The financial loan-grant mix for WWDC contains three steps for Level III projects.
The maximum grant available is 75%, which requires the project sponsors to
demonstrate to WWDC that they have a severe financial hardship. The typical grant is
67%, which requires the project sponsors to prove to WWDC that they will or have taken steps to make the project financially self-supporting. WWDC may provide smaller grants for projects not meeting either criterion listed.

WWDC loan guidelines establish a minimum interest rate of 4%, which may be increased by future legislature. The term of a loan cannot exceed 50 years after substantial completion of the project and the term of the loan can never exceed the economic impact of the project. WWDC may recommend that the payment of interest and principal be deferred for a period of up to 5 years after substantial completion of the project. Also, WWDC may recommend deferring the interest accrual during the deferred payment period. These conditions are granted on a limited basis with consideration given to the project sponsor's method of repayment and longevity of existence as a legal entity. In no event is the deferral period and loan repayment period allowed to exceed 50 years.

**Wyoming Drinking Water State Revolving Fund (DWSRF)**

Applicants to the DWSRF program may be state agencies, counties, municipalities, joint powers boards, and other entities constituting a political subdivision under the laws of the State (such as water improvement districts). Eligible projects for DWSRF funding include those involving drinking water sources, treatment, transmission, storage, and distribution or projects that create a new public water system. The project must also be prioritized in the current DWSRF Comprehensive Priority List provided in Appendix J. The priority ranking system is based on public health issues, compliance issues, system deficiencies, and affordability criteria. Although the Northwest Water Supply Project may not be at the top of the priority list for
DWSRF funding, conversations with DWSRF personnel indicate that there may be a surplus of funding available and that many of the projects meeting the DWSRF requirements are being granted funding.

The Office of State Lands must determine that the applicant can repay the loan by a proven source of security for loan repayment (e.g., tap fees, utility rates, 1% sales tax, etc.). The loan term can be up to 20 years. The interest rate is currently 2.5% with a 1.0% origination fee collected at loan closing as shown in the State Loan and Investment Board Chapter 14 which is included as Appendix M. However, loan repayment must begin within one year after substantial completion of the project as compared to the possible five year deferral period of a WWDC loan.

**Mineral Royalty Grant Program (MRGP)**

The MRGP is administered by the State Loan and Investment Board (SLIB) and is funded by the Federal Mineral Royalties and Bonus Payments that are subject to legislative appropriation. This program is run on a biennium in which the state legislature approves funding for the SLIB. This grant is a highly sought after grant and has stiff competition between applicants while also requiring a strict timeline for completion of the project to be submitted with the application. Eligible applicants for this grant program are counties, municipalities, joint powers boards, and certain special districts.

The SLIB splits funds into two grant allocations with 12.5% of the funds set aside to cover 75% of project cost and the other 87.5% of the funds set aside to cover 50% of project cost. For a municipality to receive the 75% grant, it must have a population of less than 1,300 or be located in a county where the three-year average of the local
government share of state sales and use tax per capita is less than 70% of the statewide average. This would be unlikely in Johnson County as the median household income in 2009 was approximately 91% of the statewide average as reported by United States Department of Agriculture Economic Research Service (2010). The MRGP criteria are provided in Appendix K. The MRGP may award grants necessary to alleviate an emergency situation which poses a direct and immediate threat to health, safety, or welfare; to comply with a federal or state mandate; or to provide an essential public service.

**Joint Powers Act Loans**

The Joint Powers Act Loan Program (2010) provides an allocation from the Permanent Mineral Fund and, like the Mineral Royalty Grant, is managed by the SLIB based on criteria provided in Appendix L. Eligible applicants for this loan include counties, municipal corporations, and various other entities. Water supply projects are typically eligible to apply for these loans. The interest rate for the 2010 calendar year, as stated by SLIB personnel, was 5.17%, which was determined by the rules provided in Appendix M. All Joint Powers Act Loans are subject to a 1% origination fee.

**United States Department of Agriculture Rural Development (USDARD)**

The USDARD office makes direct loans and grants funded under the Rural Utilities Service (an agency of the USDARD) to build or improve essential public use facilities such as water and sewer facilities. The USDARD provides loans and grants for both construction and non-construction costs including land, equipment, engineer services, legal services, capitalized interest, and initial operating funds. The funds are available to non-profit corporations and public bodies such as municipalities, counties
and special purpose districts. The loans and grants may only benefit rural areas or incorporated communities with a population of up to 10,000, which would include the City. While the WWDC loans and grants are only available for water supply and transmission, the USDARD loans and grants are available for water supply, transmission and distribution. Also, if the sponsors would like to pursue funding for the special interest districts, the USDARD would be a possible funding source.

The USDARD grants are based on two separate maximum amounts: 75% if the median household income for the service is below 80% of the state nonmetropolitan median income and 45% if the median household income for the service is greater than 80% of the state nonmetropolitan median income. Applicants are advised that the previous amounts are maximum grant amounts and may be reduced by availability of funds and grant determination procedures. A primary concern of the USDARD is that the applicant maintains reserve accounts that are available for costs such as emergency repairs, maintenance, and loan repayment, which is similar to WWDC. As discussed with USDARD personnel, the City is at the intermediate level for household income, but would likely still qualify for a grant. The average grant percentage, as reported by USDARD personnel, is 25%.

There is no maximum dollar amount on USDARD loans and they are determined based on the amount required to meet the applicant’s needs and its ability to handle the repayment schedule. The interest rates will vary depending on household income, with higher interest rates required for higher income areas. The maximum loan term is a period of 40 years or the useful life of the project, whichever is less. The average
interest rate, as stated by USDARD personnel, in January 2011 was approximately 3.75%.

**Wyoming Business Council (WBC)**

WBC has two separate funding programs: 1) the Wyoming Community Development Block Grant (CDBG) Program; and 2) the Business Ready Community Grant and Loan (BRC) Program. For an applicant to be selected by the CDBG program it must meet one of the three objectives which are: 1) to benefit low and moderate income families; 2) aid prevention/elimination of slums; or 3) aid activities designed to meet community development needs. The criteria for the CDBG program are included in Appendix N. The maximum grant for community development public infrastructure is $500,000. The BRC loan and grant program is for the purpose of promoting economic development in order to improve economic health and a stronger State economy. The criteria for the BRC loan and grant program are included in Appendix N. The maximum BRC grant for a community readiness project is $1,000,000 and the applicant can request an additional $1,500,000 under the loan component of the program annually.

**Federal Aviation Administration (FAA)**

Although the FAA provides grants and loans for improvement projects, they would not fund water projects that are used for distribution outside of the Airport. However, the Airport service line would be a likely candidate for FAA funding through the Airport Improvement Program grants and loans, as stated by FAA personnel.

**Abandoned Mine Lands (AML)**

Although AML contributed to public works projects in the past, they are currently not contributing funding to new projects.
**Wyoming Department of Transportation (WYDOT)**

Funding from WYDOT may occur if the Northwest Water Supply Project became an enhancement feature on a County Road Project or Industrial Road Project. However, currently WYDOT is not constructing new road projects. Therefore, WYDOT would not be an applicable funding source at the present time.

**Johnson County**

The County may be a source of funding for the Northwest Water Supply Project through various options such as: 1) grants; 2) loans; or 3) a cost sharing agreement with the City. Potential rates and percentages for this option are unknown.

**Capital Facilities Tax**

Under Wyoming Statute 39-15-202, Johnson County could impose an excise tax, not to exceed two percent (2%), on retail sales of tangible personal property, admissions, and services made within the County. The revenue from the tax could then be used in a specified amount for purposes authorized by the qualified electors. Although Johnson County currently does not impose an excise tax (commonly referred to as a capital facilities tax) one could be implemented to fund projects such as the Northwest Water Supply Project. To impose an excise tax, it must be submitted to a vote in the County, and a majority must vote in favor of the tax. If the tax is approved then it is submitted at every other subsequent general election until it is deleted.

**Funding Sources Summary**

The Northwest Water Supply Project has five available grant programs: 1) the Wyoming Water Development Commission; 2) the Mineral Royalty Grant Program; 3) the Rural Development/Rural Utility Service; 4) the Wyoming Community Development
Block Grant; and 5) the Business Ready Community Grant and Loan. The project also
has five loan programs available: 1) the Wyoming Water Development Commission;
2) the Drinking Water State Revolving Fund; 3) the Joint Powers Act Loans; 4) the Rural
Development/Rural Utility Service; and 5) the Business Ready Community Grant and
Loan. Table 12-1 contains a summary of these available grant and loan programs.
Table 12-1. Funding Sources Summary

<table>
<thead>
<tr>
<th>Funding Program</th>
<th>Administration</th>
<th>Maximum Grant Percentage</th>
<th>Typical Grant Percentage</th>
<th>Loan Interest Rate</th>
<th>Origination Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wyoming Water Development Commission</td>
<td>Wyoming Water Development Commission</td>
<td>75%</td>
<td>67%</td>
<td>4.0%</td>
<td>--</td>
</tr>
<tr>
<td>Wyoming Drinking Water State Revolving Fund</td>
<td>Wyoming Department of Environmental Quality</td>
<td>--</td>
<td>--</td>
<td>2.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Mineral Royalty Grant Program</td>
<td>State Loan and Investment Board</td>
<td>75%</td>
<td>50%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Joint Powers Act Loans</td>
<td>State Loan and Investment Board</td>
<td>--</td>
<td>--</td>
<td>5.17%</td>
<td>1.0%</td>
</tr>
<tr>
<td>United States Department of Agriculture Rural Development</td>
<td>United States Department of Agriculture Rural Utilities Service</td>
<td>75%</td>
<td>25%</td>
<td>3.75%</td>
<td>--</td>
</tr>
<tr>
<td>Wyoming Community Development Block Grant Program</td>
<td>Wyoming Business Council</td>
<td>$500,000</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Business Ready Community Grant and Loan Program</td>
<td>Wyoming Business Council</td>
<td>$1,000,000</td>
<td>--</td>
<td>Zero to low interest as recommended by board</td>
<td>--</td>
</tr>
<tr>
<td>Grant/Loan/Cost Sharing Agreement</td>
<td>Johnson County</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

---

1Only available funding sources are included in this summary table.

2No maximum dollar amount is set for grants with percentage only, maximum dollar amount available is determined by funding available from funding agency.

3The City and County may reach a joint agreement for financing the Northwest Water Supply Project and potential rates and percentages are unknown.
City of Buffalo Water System Revenue and Costs

The City’s 2011 projected water budget is shown in Table 12-2. The 2011 water budget is based on the past five years. The City’s current water loans (DWSRF and WWDC) and accounts (the Water Debt Reserve Account and the Operation and Maintenance Account) with associated interest rates as of January, 2011 are shown in Table 12-3. Currently, the City’s Water Reserve/Operation Accounts are earning very low interest rates. The Water Debt Reserve Account does not meet the typical benchmark of paying for major repairs over the next twenty years, as stipulated by WWDC. However, the Operation and Maintenance Account is earning $3,000 or 1.8% of the $165,000 ($3,000/$165,000=1.8%) annual Operation and Maintenance payment, which meets the typical benchmark of earning 1.5-2.5% of the annual operation and maintenance costs. The amount in the City’s Water Loans and Reserve/Operation Accounts will vary over the life of the Northwest Water Supply Project; however as a basis for financial estimates it is assumed that the annual loan payments and interest earnings will be approximately the same over the life of the project. As is shown in Table 12-2, the City’s water system is currently financially self-supporting.

Table 12-2. City of Buffalo 2011 Water Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Annual Amount</th>
<th>% of Total Annual Water Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Payments</td>
<td>Revenue</td>
</tr>
<tr>
<td>Required Water Debt Payments</td>
<td>$ 364,000</td>
<td>--</td>
</tr>
<tr>
<td>Employee Cost</td>
<td>$ 405,550</td>
<td>--</td>
</tr>
<tr>
<td>Operation and Maintenance</td>
<td>$ 165,000</td>
<td>--</td>
</tr>
<tr>
<td>Administration and Overhead</td>
<td>$ 122,200</td>
<td>--</td>
</tr>
<tr>
<td>Water Rates</td>
<td>--</td>
<td>$ 1,157,000</td>
</tr>
<tr>
<td>Water Tap Fees</td>
<td>--</td>
<td>$ 35,000</td>
</tr>
<tr>
<td>Hydroelectric Revenue¹</td>
<td>--</td>
<td>$ 120,000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$ 1,056,750</td>
<td>$ 1,312,000</td>
</tr>
</tbody>
</table>

¹The City uses all of the hydroelectric revenue as additional water debt payment.
Table 12-3. City of Buffalo Water Debt and Accounts

<table>
<thead>
<tr>
<th>Item</th>
<th>Balance</th>
<th>Interest Rate</th>
<th>Annual Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Loan Accounts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DWSRF Loans¹</td>
<td>$ 6,772,000</td>
<td>2.50%</td>
<td>$ 169,300</td>
</tr>
<tr>
<td>WWDC Loans²</td>
<td>$ 4,500,000</td>
<td>4.00%</td>
<td>$ 180,000</td>
</tr>
<tr>
<td><strong>Water Reserve/Operation Accounts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Debt Reserve Account</td>
<td>$ 2,969,000</td>
<td>0.21%³</td>
<td>$ 6,230</td>
</tr>
<tr>
<td>Operation and Maintenance Account</td>
<td>$ 1,429,000</td>
<td>0.21%³</td>
<td>$ 3,000</td>
</tr>
</tbody>
</table>

¹DWSRF loans are for the water treatment plant (paid in full in 2028) and the west tank (paid in full in 2027) as stated by City personnel.
²WWDC loans are for the Tie Hack Reservoir (paid in full in 2048), the diversion dam (paid in full in 2016) and the raw water line (paid in full in 2022) as stated by City personnel.
³Interest as stated by First National Bank personnel in a July, 2011 phone conversation.

Costs of Major Repairs in Next Twenty Years

Major construction projects planned for the City are shown in Table 12-4. The costs shown for each of these projects include the 2011 dollars cost and the projected construction year cost. The interest received from the City Water Reserve/Operation Accounts (see Table 12-3) do not produce the funds necessary to pay for major repairs or projects that will be required over the next twenty years, as indicated in Table 12-4. Currently, the City’s Water Debt Reserve Account is earning $6,230 annually, which is only about 4.3% of the annual estimated amount of $146,270 ($6,230/$146,270=4.3%) required to pay for major repairs or projects over the next 20 years. The major repairs and projects over the next 20 years and associated financing were compiled as of the submission of this report. Deviation of these projects and financing influence the proposed schedule and/or estimate of costs provided herein.
Table 12-4. City of Buffalo Future Construction Projects

<table>
<thead>
<tr>
<th>Water Construction Project</th>
<th>Cost Estimates</th>
<th>Estimated Construction Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
<td>2015</td>
</tr>
<tr>
<td>Concrete Waterline</td>
<td>$448,850</td>
<td>$505,180</td>
</tr>
<tr>
<td>Sunset Avenue Waterline</td>
<td>$299,820</td>
<td>$391,200</td>
</tr>
<tr>
<td>North Carrington Waterline</td>
<td>$376,090</td>
<td>$490,710</td>
</tr>
<tr>
<td>West Gatchell Street Waterline</td>
<td>$233,570</td>
<td>$353,300</td>
</tr>
<tr>
<td>East Development</td>
<td>$675,770</td>
<td>$1,184,970</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>N/A</strong></td>
<td><strong>$2,925,360</strong></td>
</tr>
<tr>
<td><strong>Amortized Annual Payment</strong></td>
<td><strong>N/A</strong></td>
<td><strong>$146,270</strong></td>
</tr>
</tbody>
</table>

1 Assuming 3% annual inflation.

City of Buffalo Adjusted Water Accounts

The City’s Water Reserve/Operation Accounts are currently earning very low interest rates as shown previously in Table 12-3. The Wyoming State Treasurers’ Asset Reserve (WYO-STAR) program was investigated as an alternate investment option that would result in higher yields than are currently being realized in the City’s Water Reserve/Operation Accounts. Shown in Table 12-5 are interest rates over the last four years with the WYO-STAR program.

Table 12-5. WYO-STAR Rates

<table>
<thead>
<tr>
<th>Month</th>
<th>Rate</th>
<th>Month</th>
<th>Rate</th>
<th>Month</th>
<th>Rate</th>
<th>Month</th>
<th>Rate</th>
<th>Month</th>
<th>Rate</th>
<th>Month</th>
<th>Rate</th>
<th>Month</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-07</td>
<td>4.390%</td>
<td>Dec-08</td>
<td>2.634%</td>
<td>Dec-09</td>
<td>1.367%</td>
<td>Dec-10</td>
<td>0.477%</td>
<td>Dec-11</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov-07</td>
<td>4.627%</td>
<td>Nov-08</td>
<td>1.983%</td>
<td>Nov-09</td>
<td>0.777%</td>
<td>Nov-10</td>
<td>0.551%</td>
<td>Nov-11</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-07</td>
<td>4.772%</td>
<td>Oct-08</td>
<td>2.267%</td>
<td>Oct-09</td>
<td>1.156%</td>
<td>Oct-10</td>
<td>0.752%</td>
<td>Oct-11</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep-07</td>
<td>4.901%</td>
<td>Sep-08</td>
<td>2.633%</td>
<td>Sep-09</td>
<td>1.035%</td>
<td>Sep-10</td>
<td>0.687%</td>
<td>Sep-11</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug-07</td>
<td>4.949%</td>
<td>Aug-08</td>
<td>2.618%</td>
<td>Aug-09</td>
<td>1.110%</td>
<td>Aug-10</td>
<td>0.666%</td>
<td>Aug-11</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jul-07</td>
<td>4.975%</td>
<td>Jul-08</td>
<td>2.595%</td>
<td>Jul-09</td>
<td>0.882%</td>
<td>Jul-10</td>
<td>0.789%</td>
<td>Jul-11</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun-07</td>
<td>--</td>
<td>Jun-08</td>
<td>2.681%</td>
<td>Jun-09</td>
<td>1.208%</td>
<td>Jun-10</td>
<td>0.675%</td>
<td>Jun-11</td>
<td>0.492%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May-07</td>
<td>--</td>
<td>May-08</td>
<td>2.638%</td>
<td>May-09</td>
<td>1.172%</td>
<td>May-10</td>
<td>0.692%</td>
<td>May-11</td>
<td>0.432%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr-07</td>
<td>--</td>
<td>Apr-08</td>
<td>3.081%</td>
<td>Apr-09</td>
<td>1.613%</td>
<td>Apr-10</td>
<td>0.914%</td>
<td>Apr-11</td>
<td>0.939%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar-07</td>
<td>--</td>
<td>Mar-08</td>
<td>3.260%</td>
<td>Mar-09</td>
<td>1.250%</td>
<td>Mar-10</td>
<td>1.279%</td>
<td>Mar-11</td>
<td>0.647%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb-07</td>
<td>--</td>
<td>Feb-08</td>
<td>3.680%</td>
<td>Feb-09</td>
<td>1.611%</td>
<td>Feb-10</td>
<td>0.802%</td>
<td>Feb-11</td>
<td>0.838%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan-07</td>
<td>--</td>
<td>Jan-08</td>
<td>5.293%</td>
<td>Jan-09</td>
<td>1.802%</td>
<td>Jan-10</td>
<td>1.160%</td>
<td>Jan-11</td>
<td>0.514%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Average Rate** 1.922%
To demonstrate the Water Reserve/Operation Accounts earning potential, the average interest rate of 1.922% from the WYO-STAR program over the last four years has been applied to the balances contained in both of the Water Reserve/Operation Accounts, and the results are shown in Table 12-6. Using the adjusted interest revenue from the Operation and Maintenance Account, the City would be earning approximately 17% of the $165,000 or $27,460 annually ($27,460/$165,000=17%), which is significantly greater than the 1.5% benchmark for an emergency fund, as stipulated by WWDC. However, WWDC also has a benchmark of paying for the major repairs over the next twenty years out of the interest earned from the Water Debt Reserve Account. Using the adjusted WYO-STAR interest rate, the Water Debt Reserve Account would only yield 39% of the required $146,270 or $57,060 annually for major repairs over the next twenty years, which would still require the City to pay the additional costs out of the water budget surplus. As stated previously, the amount in the City’s Water Reserve/Operation Accounts may vary over time; however the values represented in Table 12-6 represent the assumed average amounts that will be in the accounts. The projected annual interest income amounts are shown in Table 12-6.

Table 12-6. WYO-STAR Adjusted City Water Revenue

<table>
<thead>
<tr>
<th>Item</th>
<th>Balance</th>
<th>WYO-STAR Interest Rate</th>
<th>Annual Interest Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Debt Reserve Account</td>
<td>$2,968,700</td>
<td>1.922%</td>
<td>$57,060</td>
</tr>
<tr>
<td>Operation and Maintenance Account</td>
<td>$1,428,700</td>
<td>1.922%</td>
<td>$27,460</td>
</tr>
</tbody>
</table>

Northwest Water Supply Project Costs

The costs associated with the Northwest Water Supply Project are discussed in Chapter 10. It is necessary that these costs be covered by the water rates from new users to the City water supply in the area of the Northwest Water Supply Project, as
discussed in Chapter 8. However, the cost that must be covered by the water rates from new users to the City is not the construction cost of the Northwest Water Supply Project; it is rather the life-cycle cost of the loan portion of the project. The Northwest Water Supply Project is assumed to have a 50-year lifespan. The 50-year lifespan window is used for the following reasons; 1) a 50-year lifespan for PVC is a conservative estimate; 2) a 25-year lifespan for PRV stations is a conservative; and 3) the maximum term of a WWDC loan is 50 years. Table 12-7 shows the life-cycle cost for operation, maintenance, and overhead of the recommended Northwest Water Supply Project Option 3.

Table 12-7. Life-Cycle Cost - Northwest Water Supply Project Option 3

<table>
<thead>
<tr>
<th>Cost Item Description</th>
<th>Type</th>
<th>Materials</th>
<th>Labor</th>
<th>Quantity</th>
<th>Lifespan (years)</th>
<th>Annual Cost</th>
<th>Total Over 50 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Design and Bid Documents (10%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>$159,000</td>
</tr>
<tr>
<td>Permitting and Mitigation (2.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>$40,000</td>
</tr>
<tr>
<td>Easement Acquisition</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>$10,000</td>
</tr>
<tr>
<td>Legal Fees (4%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>$64,000</td>
</tr>
<tr>
<td>Pre-Construction Subtotal with 15% contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$314,000</td>
</tr>
<tr>
<td>Mobilization/Demobilization (7.5%)</td>
<td>LS</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>$88,400</td>
</tr>
<tr>
<td>Bypass Waterline</td>
<td>LS</td>
<td>$2,500</td>
<td>$2,500</td>
<td>1</td>
<td>50</td>
<td>$100</td>
<td>$5,000</td>
</tr>
<tr>
<td>Eagle Summit PRV Station</td>
<td>EA</td>
<td>$80,000</td>
<td>$40,000</td>
<td>1</td>
<td>25</td>
<td>$4,800</td>
<td>$240,000</td>
</tr>
<tr>
<td>PVC C900 12” DR18</td>
<td>LF</td>
<td>$27</td>
<td>$8</td>
<td>11,800</td>
<td>50</td>
<td>$8,260</td>
<td>$413,000</td>
</tr>
<tr>
<td>Water Main Connection</td>
<td>LS</td>
<td>$1,544</td>
<td>$1,544</td>
<td>2</td>
<td>50</td>
<td>$124</td>
<td>$6,200</td>
</tr>
<tr>
<td>French Creek Waterline Cut and Cover</td>
<td>LF</td>
<td>$75</td>
<td>$75</td>
<td>400</td>
<td>50</td>
<td>$1,200</td>
<td>$60,000</td>
</tr>
<tr>
<td>Airport Road PRV Station</td>
<td>EA</td>
<td>$80,000</td>
<td>$40,000</td>
<td>1</td>
<td>25</td>
<td>$4,800</td>
<td>$240,000</td>
</tr>
<tr>
<td>Isolation Valves</td>
<td>EA</td>
<td>$1,000</td>
<td>$1,000</td>
<td>13</td>
<td>50</td>
<td>$520</td>
<td>$26,000</td>
</tr>
<tr>
<td>Isolation Valves w/ Manhole</td>
<td>EA</td>
<td>$5,000</td>
<td>$5,000</td>
<td>2</td>
<td>50</td>
<td>$400</td>
<td>$20,000</td>
</tr>
<tr>
<td>Blow-Off Valve</td>
<td>EA</td>
<td>$7,500</td>
<td>$7,500</td>
<td>8</td>
<td>50</td>
<td>$2,400</td>
<td>$120,000</td>
</tr>
<tr>
<td>Combination Air Valves</td>
<td>EA</td>
<td>$6,000</td>
<td>$6,000</td>
<td>4</td>
<td>50</td>
<td>$960</td>
<td>$48,000</td>
</tr>
<tr>
<td>Construction Engineering</td>
<td>LS</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$117,800</td>
</tr>
<tr>
<td>Construction Subtotal with 15% contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,592,100</td>
</tr>
<tr>
<td>PRV O&amp;M</td>
<td>EA</td>
<td>$720</td>
<td>$720</td>
<td>2</td>
<td>N/A</td>
<td>$2,880</td>
<td>$144,000</td>
</tr>
<tr>
<td>Total Life-Cycle Cost with 15% contingency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,071,700</td>
</tr>
</tbody>
</table>
A summary of the projected annual water revenue to the City from the Northwest Water Supply Project is shown in Table 12-8. The amounts shown in Table 12-8 are based on 2011 water rates and water tap fees. This table assumes the 52 possible water users in the project area all tap onto the City’s waterline with ¾-inch water taps. The table also assumes that Northwest Water Supply Project participants will pay twice the current rates for the City users, since they are located outside of City limits as per City Ordinance (i.e., $5,000 tap rate and $70 per month average water bill)

Table 12-8. Northwest Water Supply Project Water Revenue

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Dollar Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Taps Total Income</td>
<td>$260,000</td>
</tr>
<tr>
<td>Water Rates Annual Income</td>
<td>$43,680</td>
</tr>
</tbody>
</table>

Four options exist for WWDC funding of the Northwest Water Supply Project: 1) 67% grant/33% loan; 2) 0% grant/100% loan; 3) 67% grant/33% loan with additional $260,000 from water tap fees; and 4) 0% grant/100% loan with additional $260,000 from water tap fees. In all funding options, a loan interest rate of 4% (typical WWDC rate) and a loan term of 30 years were assumed for repayment of the Northwest Water Supply Project construction cost ($1,520,712) shown in Chapter 10. The assumption to repay the total project construction cost over a 30-year loan period leaves revenue from the remaining 20 years of the project life-cycle (50 – 30 = 20 years) available to assist in water debt payments for the City. Water tap fees will likely not contribute directly to the Northwest Water Supply Project water debt. However, the monies will be used for retirement of other water related debt (i.e., the water treatment plant). Therefore, the additional water tap fees payment is shown as a reference to demonstrate the effect
they will have on other water related debt. The required annual payments for the four funding scenarios are shown in Table 12-9.

Table 12-9. Northwest Water Supply Project WWDC Funding Scenarios

<table>
<thead>
<tr>
<th>Funding Scenario</th>
<th>Required Annual Loan Payment (30-years)</th>
<th>Required Annual O&amp;M Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>67% Grant; 33% Loan</td>
<td>$29,020</td>
<td>$12,937</td>
</tr>
<tr>
<td>0% Grant; 100% Loan</td>
<td>$87,940</td>
<td>$12,937</td>
</tr>
<tr>
<td>67% Grant; 33% Loan and Projected Water Tap Fees</td>
<td>$13,990</td>
<td>$12,937</td>
</tr>
<tr>
<td>0% Grant; 100% Loan and Projected Water Tap Fees</td>
<td>$72,910</td>
<td>$12,937</td>
</tr>
</tbody>
</table>

**City of Buffalo Adjusted Water Rates**

The City has several major repairs/projects that are planned over the next twenty years as shown in Table 12-4. The traditional funding for projects of this nature is from the interest earned on a Water System Operation and Maintenance account. However, as shown in Table 12-3, the Water System Operation and Maintenance account is not earning sufficient funds to pay for the upcoming projects. The City currently has a $220,250 budget surplus (see Table 12-2), which does not take into account $35,000 estimated for annual water tap fees. Because the City is currently earning a very low interest rate on its Water System Operation and Maintenance account, sufficient funds do not exist in the annual budget surplus to fund the City’s major water system repairs over the next twenty years, as shown in Table 12-10. Currently the City is $39,790 short per year in required funds to cover the projected major repairs over the next twenty years. Although the City is short of the required funds for major repairs several solutions exist for this situation such as: 1) utilize the hydroelectric revenue ($120,000) that is earmarked for water debt bonus payments to assist in water system repairs; 2) invest the City’s Water Reserve/Operation Accounts in a higher earning account such
as WYO-STAR; and 3) apply for funding assistance such as WWDC for the concrete supply waterline replacement or USDARD for the distribution system waterline replacements.

Table 12-10. Budget Surplus or Deficit and Required Major Repair Payments

<table>
<thead>
<tr>
<th>Item</th>
<th>Income Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Budget Surplus</td>
<td>$220,250</td>
</tr>
<tr>
<td>Water Debt Reserve Account Earnings</td>
<td>$6,230</td>
</tr>
<tr>
<td>Hydroelectric Revenue¹</td>
<td>$(120,000)</td>
</tr>
<tr>
<td>Required Annual Payment 20-yr Projects</td>
<td>$(146,270)</td>
</tr>
<tr>
<td>Total Budget Surplus</td>
<td>$(39,790)</td>
</tr>
</tbody>
</table>

¹Set aside for additional water related debt payments.

As part of the construction of the Northwest Water Supply Project, additional funding may be required through water rate increases by the City. The water rate increases required for life-cycle funding of the Northwest Water Supply Project are shown in Table 12-11. The water rate increases are evaluated for two WWDC-funding scenarios: 1) 67% grant/33% loan; and 2) 0% grant/100% loan. Table 12-11 also contains a comparison for the percentage of Johnson County’s median household income the water rates would account for. For the WWDC funding scenario 67% grant/33% loan, the required increase in water rates are zero, which assumes no water tap fee bonus payment and no additional payments from the City’s water budget surplus.
Table 12-11. WWDC Funding of Northwest Water Supply Project

<table>
<thead>
<tr>
<th>Item</th>
<th>67% Grant; 33% Loan Amount</th>
<th>0% Grant; 100% Loan Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Water Rate Revenue</td>
<td>$43,680</td>
<td>$43,680</td>
</tr>
<tr>
<td>Required Annual Payment</td>
<td>$40,040</td>
<td>$98,960</td>
</tr>
<tr>
<td>Additional Annual Water Rate Required</td>
<td>$(3,640)</td>
<td>$55,280</td>
</tr>
<tr>
<td>Water Rate % Increase&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0.000%</td>
<td>4.60%</td>
</tr>
<tr>
<td>Water Rate Total % of Household Income&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1.92%</td>
<td>2.01%</td>
</tr>
</tbody>
</table>

<sup>1</sup>Based on Table 12-1 Water Rates ($1,157,000) plus Projected Water Rates ($43,680)

<sup>2</sup>Based on median household income of $49,457 as reported by the United States Department of Agriculture Economic Research Service (2010) and a population for the City of 4,878 as discussed in Chapter 8.

Northwest Water Supply Project Debt Retirement

The debt retirement schedule for the Northwest Water Supply Project preferred Option 3 is shown in Table 12-12. The payment plan associated with this debt retirement schedule includes the projected revenue to the City from water rates in the Northwest Water Supply Project Area only. Also this plan assumes that the Northwest Water Supply Project will be constructed in the Fall of 2014 and that the City’s payments will start in 2015. Since the project is estimated to be completed at the end of 2014, all water rate fees will begin thereafter. This structure also assumes that the project area will not be annexed into the City limits and the water users will therefore be paying the County rates (two times the City rates). The operation and maintenance annual cost is $12,937, which is shown in Table 12-9. The annual loan payment for this debt retirement plan is $29,020 (see Table 12-9), assuming a 67% grant/33% loan scenario from WWDC. However the total of the operation and maintenance and loan annual payments is less than the projected water rates of $43,680. Therefore the annual payment is equal to the projected water rates. As is shown by Table 12-12 at
the end of the life of the project (2065) the Northwest Water Supply Project will have contributed an estimated total of $627,799 to the City.

Table 12-12. Debt Retirement Schedule for Northwest Water Supply Project

<table>
<thead>
<tr>
<th>Year</th>
<th>Balance¹</th>
<th>Interest</th>
<th>O&amp;M and Administrative Fees</th>
<th>City Payment</th>
<th>NW Water Projected Revenue²</th>
<th>Total Annual Payment (O&amp;M and Loan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$(501,835)</td>
<td>$(20,073)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2016</td>
<td>$(492,888)</td>
<td>$(19,716)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2017</td>
<td>$(483,584)</td>
<td>$(19,343)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2018</td>
<td>$(473,907)</td>
<td>$(18,956)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2019</td>
<td>$(463,844)</td>
<td>$(18,554)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2020</td>
<td>$(453,377)</td>
<td>$(18,135)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2021</td>
<td>$(442,492)</td>
<td>$(17,700)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2022</td>
<td>$(431,172)</td>
<td>$(17,247)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2023</td>
<td>$(419,399)</td>
<td>$(16,776)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2024</td>
<td>$(407,155)</td>
<td>$(16,286)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2025</td>
<td>$(394,421)</td>
<td>$(15,777)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2026</td>
<td>$(381,178)</td>
<td>$(15,247)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2027</td>
<td>$(367,405)</td>
<td>$(14,696)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
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<tr>
<td>2028</td>
<td>$(353,081)</td>
<td>$(14,123)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
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<tr>
<td>2029</td>
<td>$(338,185)</td>
<td>$(13,527)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
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<tr>
<td>2030</td>
<td>$(322,692)</td>
<td>$(12,908)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2031</td>
<td>$(306,580)</td>
<td>$(12,263)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2032</td>
<td>$(289,823)</td>
<td>$(11,593)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2033</td>
<td>$(272,396)</td>
<td>$(10,896)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2034</td>
<td>$(254,271)</td>
<td>$(10,171)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
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<tr>
<td>2035</td>
<td>$(235,422)</td>
<td>$(9,417)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2036</td>
<td>$(215,819)</td>
<td>$(8,633)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2037</td>
<td>$(195,432)</td>
<td>$(7,817)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2038</td>
<td>$(174,229)</td>
<td>$(6,969)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
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<tr>
<td>2039</td>
<td>$(152,178)</td>
<td>$(6,087)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
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<td>2040</td>
<td>$(129,246)</td>
<td>$(5,170)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
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<td>2041</td>
<td>$(105,395)</td>
<td>$(4,216)</td>
<td>$(12,937)</td>
<td>-</td>
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<td>$41,957</td>
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<tr>
<td>2042</td>
<td>$(80,591)</td>
<td>$(3,224)</td>
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<td>-</td>
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<td>$41,957</td>
</tr>
<tr>
<td>2043</td>
<td>$(54,795)</td>
<td>$(2,192)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2044</td>
<td>$(27,967)</td>
<td>$(1,119)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
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<tr>
<td>2045</td>
<td>$(65)</td>
<td>$(3)</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$41,957</td>
</tr>
<tr>
<td>2050</td>
<td>$152,675</td>
<td>$73</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$12,937</td>
</tr>
<tr>
<td>2055</td>
<td>$309,076</td>
<td>$74</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$12,937</td>
</tr>
<tr>
<td>2060</td>
<td>$467,443</td>
<td>$75</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$12,937</td>
</tr>
<tr>
<td>2065</td>
<td>$627,799</td>
<td>$76</td>
<td>$(12,937)</td>
<td>-</td>
<td>$43,680</td>
<td>$12,937</td>
</tr>
</tbody>
</table>

¹Beginning balance $1,520,712×33%=$501,835
²An additional payment of $260,000 for the projected tap fees is not included, however, these fees are likely to be used for payment of other water related debt.
**Water System Financing Recommendations**

The City’s Water Reserve Accounts are currently earning very low interest rates and are not capable of providing sufficient funds for an emergency fund or to pay for construction of major repairs over the next twenty years. It is recommended that alternative investment options such as WYO-STAR be investigated by the City to enhance interest earnings on the Water Reserve/Operation Accounts. As is shown by tables in Chapter 12, the WWDC 67% grant/33% loan option would allow the Northwest Water Supply Project to be a self-supporting entity. Also the loan for the Northwest Water Supply Project would be paid in full in 30 years, which allows the City to generate revenue for the final 20 years of the life of the project. As such, the recommended funding option for the Northwest Water Supply Project is the WWDC 67% grant and 33% loan. If interest is expressed by the Sponsors to construct the proposed water storage tank and East Development waterline in conjunction with the Northwest Water Supply Project waterline, WWDC would be the recommended funding agency.
CHAPTER 13. REFERENCES


Appendix A

City of Buffalo

Municipal Water Rights
Permit 6408R
Willow Park Reservoir
WHEREAS, Willow Park Reservoir Co. has presented to the State Board of Control of the State of Wyoming, proof of construction of the Willow Park Reservoir, Permit No. 6408, Res., located in T. 52N., R. 86W., Section 26, Johnson County, Wyoming; and

Whereas, the proof of construction sets forth that said reservoir has been completed in accordance with the terms of said permit to a capacity sufficient to impound 4457 acre-feet of water; and that the source of the quantity of water authorized to be stored in the Willow Park Reservoir is obtained from South Fork South Pinney Creek, tributary of South Pinney Creek, tributary of Pinney Creek, tributary of Clear Creek, tributary of Powder River on which the reservoir is located.

NOW KNOW YE, That the State Board of Control, under the provisions of the Statutes of Wyoming, has by an order duly made and entered on the 20th day of March, A.D. 1962, in Order Record No. 14, Page 489, determined the priority and capacity of said reservoir as follows:

Name of Owner: Willow Park Reservoir Co.; Address: Lander, Wyoming;
Date of Priority: August 26, 1939; Total available storage capacity in the Willow Park Reservoir, as constructed under provisions of Permit No. 6408, Res., is 4457 acre-feet. (4132 Ac. Ft. + 325 Ac. Ft. Dead Storage for Fish)

The right to store water is limited to such an amount as shall be beneficially used, not to exceed one filling annually of said reservoir, for irrigation, stock, domestic and fish.

IN TESTIMONY WHEREOF, I, EARL LLOYD, President of the State Board of Control, have hereunto set my hand this 20th day of March, A.D. 1962, and caused the seal of said Board to be hereunto affixed.

ATTEST:

Earl Lloyd
President.

Ex-officio Secretary.
Note:
The original concrete outlet structure for the principal stream was not have excess branches, freezing, and thawing action. The east wall caused it to buckle. Improved backfill after six weeks x 10 feet across the structure prevents further movement. A interceptor drain and interception and interception drain outlets appear to be working and have reduced pressure from east wall of structure.

Plan
Scale: 1/6" = 1'-0"

Area Plan View
Scale: 1/6" = 1'-0"

Detail A
Scale: 1/6" = 1'-0"

Section B-B
Scale: 1/6" = 1'-0"

John R. Long, hereby certify that these drawings correctly represent the "as built" conditions of the Willow Park Reservoir outlet repairs (Contract No. 6499) installed in the fall of 1978 and that the repair work was done under my direction and in accordance with criteria and policy of the U.S. Department of Agriculture, Soil Conservation Service. Registration No. 233.

John R. Long

Willow Park Reservoir Outlet Structure
As Built Repairs Accomplished in 1978

U.S. Department of Agriculture
Soil Conservation Service

Permit No. 6499 Rev. E-A
PROFILE ON CENTERLINE OF PRINCIPAL SPILLWAY BETWEEN E.J.3 & E.J.4
Scale: 1" = 1'-0"

SECTtONAL ELEVATION FF-FF
Scale: 1" = 1'-0"

SECTtONAL ELEVATION GG-GG

SECTtONAL ELEVATION RR-RR
ANTI-SEEP COLLAR
Scale: 1" = 1'-0"

NOTES:
1. All reinforcing steel shall be furnished with armature
   as specified for mild steel reinforcing in
   Table 10.1.4.2.
2. Any change in reinforcing armature shall be made only
   by approval of the Engineer.

WILLow PARK RESERVOIR

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
<table>
<thead>
<tr>
<th>NAME</th>
<th>SIZE</th>
<th>QUANTITY</th>
<th>LENGTH</th>
<th>TYPE</th>
<th>C</th>
<th>R</th>
<th>D</th>
<th>F</th>
<th>S</th>
<th>L</th>
<th>TOTAL LENGTH</th>
<th>BASE</th>
<th>B</th>
<th>QUANTITY</th>
<th>LENGTH</th>
<th>TYPE</th>
<th>N</th>
<th>D</th>
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</tr>
</tbody>
</table>

**ROAD TYPES**

- **Type 1**
- **Type 2**
- **Type 3**
- **Type 4**
- **Type 5**
- **Type 6**
- **Type 7**
- **Type 8**

**ROAD TOTALS**

- **Short**
- **Long**

---

**NOTES:**
1. NAME OF ROAD NAME #1 THE HENNESSEY POTRERO CONSTRUCTION PROJECT.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE.
3. ROAD TO ROAD.
4. ROAD TO ROAD W. 34TH ST.
5. ROAD TO ROAD N. 34TH ST.
6. ROAD TO ROAD E. 34TH ST.

**WILLOW PARK RESERVOIR**

- Johnston County
- Wyoming
- U.S. Department of Agriculture
- Soil Conservation Service
Permit 9700R

Enlargement of Tie Hack Reservoir
THE STATE OF WYOMING
Certificate of Construction of Reservoir

WHEREAS, City of Buffalo has presented to the Board of Control of the State of Wyoming, proof of construction of the Enlargement of the Tie Hack Reservoir, Permit No. 9700 R, located in

Studio, Section 23; Studio, Section 24; Wenas, Wenas, Wenas, Wenas, Section 26, T. 50 N., R. 84 W., Johnson County, Wyoming;
Outlet: Sennes, Section 23-50-84

Whereas, the proof of construction sets forth that said reservoir has been completed in accordance with the terms of said permit to a capacity sufficient to impound

788.44 acre-feet of water; and that the source of the quantity of water authorized to be stored in the Enlargement of the Tie Hack Reservoir is obtained from South Fork Clear Creek, tributary Clear Creek, tributary Powder River, tributary Yellowstone River

NOW KNOW YE, That the State Board of Control, under the provisions of the Statutes of Wyoming, has, by an order duly made on January 19, 1999 and entered on May 1, 1999, in Order Record 31 Page 384, determined and established the priority and amount of such appropriation as follows:

Name of Owner City of Buffalo Address 66 W. Main Street, Buffalo, WY 82834
Date of Priority September 12, 1989 Total available storage capacity in the Enlargement of the Tie Hack Reservoir, as constructed under provisions of

Permit No. 9700 R, is 788.44 acre-feet. 2,435.11 acre feet. This enlargement is for 788.44 acre feet and the original Tie Hack Reservoir, Permit No. 9489 R, is for 1,648.67 acre feet.

The right to store water is limited to such an amount as shall be beneficially used, not to exceed one-fifth annually of said reservoir for recreational purposes.

IN TESTIMONY WHEREOF, I, Gordon W. Fasset, President of the State Board of Control, have hereunto set my hand this 19th day of February, A.D. 1999, and caused the seal of said board to be hereunto affixed.

ATTEST:

Allen Cunningham Ex officio Secretary

[Signature] [Signature] President
Permit 5105E

McNeese Ditch Enlargement
THE STATE OF WYOMING
Certificate of Appropriation of Water

WHEREAS, City of Buffalo has presented to the Board of Control of the State of Wyoming proof of the appropriation of water from Clear Creek, tributary Powder River through the McNeesa Ditch under Permit No. 5105 Enr. for irrigation stock and domestic purposes of the lands herein described, lying and being in Johnson County, Wyoming.

NOW KNOW YE, That the State Board of Control, under the provisions of Chapter 122, Wyoming Revised Statutes, 1931, has, by an order duly made and entered on the 10th day of November, A. D. 1938, in Order Record No. 9, Page 693, determined and established the priority and amount of such appropriation as follows:

Name of Appropriator: City of Buffalo
Postoffice Address: Buffalo, Wyoming
Date of Appropriation: February 14, 1938
Total Acreage: One hundred forty five and nine tenths (145.9) acres

<table>
<thead>
<tr>
<th>TWP</th>
<th>RANGE</th>
<th>SEC</th>
<th>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</th>
<th>TOTAL</th>
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<td>5</td>
<td>55.7</td>
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<td>32.2</td>
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</tbody>
</table>

The right to water hereby confirmed and established is limited to irrigation stock and domestic purposes and the use is restricted to the place where acquired and to the purpose for which acquired; rights for irrigation not to exceed one cubic foot of water per second for each seventy acres of land for which the appropriation is herein determined and established.

IN TESTIMONY WHEREOF, I, JOHN D. QUINN, President of the State Board of Control, have hereto set my hand this 17th day of February, A. D. 1938, and caused the seal of said Board to be hereto affixed.

Attest: Earl Lloyd Ex officio Secretary.

President.
CERTIFICATE OF SURVEYOR

STATE OF WYOMING
COUNTY OF JOHNSON

I, Ernest O. Eder of Buffalo Wyoming hereby certify that this map was made from notes taken during an actual survey made by me on April 9th, 1928 and February 2, 1938 and that it correctly represents the irrigation works described in the accompanying application together with a meander of the streams and shows accurately the location and area of the lands proposed to be irrigated in each subdivision.

Ernest O. Eder
SURVEYOR

Grade = 2' per 1000'
Velocity = 1.5 feet per second
Capacity = 6.75 cfs per sec.

MAP TO ACCOMPANY APPLICATION FOR CITY ENLARGEMENT OF MCNEES DITCH

APPLICANT

CITY OF BUFFALO, BUFFALO, WYOM. Scale = 1 inch = 2000 feet.

Approved: March 7, 1938.

John D. Quinn, State Engineer.
Permit 19276D
Pipe Line Ditch
THE STATE OF WYOMING

Certificate of Appropriation of Water

WHEREAS, City of Buffalo has presented to the Board of Control of the State of Wyoming proof of the appropriation of water from North Branch Clear Creek, tributary of Clear Creek, tributary of Powder River through the Pipe Line. Ditch under Permit No. 12873 for irrigation of the lands herein described, lying and being in Johnson County, Wyoming

NOW KNOW YE, That the State Board of Control, under the provisions of Chapter 122, Wyoming Revised Statutes, 1931, has, by an order duly made and entered on the 6th day of May, A. D. 1940, in Order Record No. 10, Page 194, determined and established the priority and amount of such appropriation as follows:

Name of Appropiator: City of Buffalo; Postoffice Address: Buffalo, Wyoming;

Date of Appropriation: December 7, 1939; Total Acreage

Amount of Appropriation: 2.0 cu. ft. per sec.; Description of land to be irrigated and for which this appropriation is determined and established:

<table>
<thead>
<tr>
<th>Twp.</th>
<th>Range</th>
<th>Sec.</th>
<th>NE ¼</th>
<th>NW ¼</th>
<th>SW ¼</th>
<th>SE ¼</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 N 82 W 26</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>31 N 82 W 27</td>
<td>27</td>
<td>x</td>
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<td></td>
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<tr>
<td>31 N 82 W 34</td>
<td>34</td>
<td>x</td>
<td>x</td>
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<td></td>
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<tr>
<td>31 N 82 W 35</td>
<td>35</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>50 N 82 W 3</td>
<td>3</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

This appropriation is limited to 2.0 cu. ft. per sec. for domestic, municipal, industrial and irrigation purposes on the following lands:

This appropriation is to be used in the City of Buffalo as it now exists or as it may be extended.

For change of point of diversion and any or all of content of this appropriation to the Buffalo Water Works Pipe Line and Ditch, see O. R. 41, Page 518.

The right to water hereby confirmed and established is limited to irrigation, municipal and industrial purposes, domestic use, and the use is restricted to the place where acquired and to the purpose for which acquired; rights for irrigation not to exceed one cubic foot of water per second for each seventy-acres of land for which the appropriation is herein determined and established.

IN TESTIMONY WHEREOF, I, Le G. Bishop, President of the State Board of Control, have hereunto set my hand this 25th day of May, A. D. 1940, and caused the seal of said Board to be hereunto affixed.

Attest: Earl Lloyd, Ex officio Secretary.
IN THE MATTER OF THE AMENDED PETITION FOR CHANGE OF POINT OF DIVERSION AND MEANS OF CONVEYANCE OF THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 19276, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE PIPE LINE DITCH, WITH PRIORITY OF DECEMBER 7, 1939; TO BE CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH;

AND AN ALTERNATE POINT OF DIVERSION FOR THE FOLLOWING APPROPRIATIONS:

A. PART OF THE CITY OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH, WITH PRIORITY OF 1879;

B. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER NO. 4 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF APRIL 1883;

C. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER NOS. 1 AND 3 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF SPRING 1883;

D. THE TOWN OF BUFFALO APPROPRIATION (AS SUCCESSOR TO BUFFALO MILL COMPANY), TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO MILL DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF JUNE 1, 1887;

E. THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 23403, WATER STORED IN WILLOW PARK RESERVOIR (PERMIT NO. 6408 RES.), DELIVERED THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH, WITH PRIORITY OF NOVEMBER 21, 1968.
(O.R. 10, P. 174; C.R. 57, P. 343; PROOF NO. 22573)
O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840
O.R. 4, P. 609; C.R. 34, P. 99; PROOF NO. 4841
O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844
O.R. 19, P. 100; C.R. 70, P. 69; PROOF NO. 2126
O.R. 19, P. 47; C.R. 70, P. 25; PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, NELS LOFGREN, 46 NORTH MAIN STREET, BUFFALO, COUNTY OF JOHNSON, STATE OF WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 13, 1997, with the following results:

FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations or portions of the appropriations involved as evidenced by Certificates of Appropriation issued by the State Board of Control.

2. THAT the appropriations involved are as follows:

   a. The City of Buffalo Appropriation, Permit No. 19276, adjudicated under Proof No. 22573, in the amount of 2.0 c.f.s. for domestic, municipal, industrial and irrigation purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Pipe Line Ditch, with priority of December 7, 1939, and of record in Order Record 10, Page 174; Certificate Record 57, Page 343;

   b. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

   c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;
d. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

e. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

f. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

3. THAT by and through its amended petition, the petitioner requested a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\SE\ of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\NE\ of said Section 6. The lands for which this change is requested are described as follows:

Township 50 North, Range 82 West
Section 3: NE\NE\

Township 51 North, Range 82 West
Section 26: SW\NW\
Section 27: SE\SE\
Section 34: E\E\
Section 35: W\W\
4. THAT by and through its amended petition, the petitioner requested an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\(^2\)NE\(^2\) of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\(^2\)NE\(^2\) of said Section 6:

a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of October 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.
5. THAT the reason for the requested change of point of diversion and means of conveyance is that hydraulic conditions at the existing diversion make measurement and administration of this appropriation difficult. The existing diversion often becomes blocked with sediment and trash and is becoming increasingly difficult and expensive to maintain. The requested change will allow a more efficient and economical use of this appropriation.

6. THAT the reason for the requested alternate point of diversion and means of conveyance is that the existing pipeline from the City of Buffalo's diversion dam to the new water treatment and hydropower plant does not have the capacity to carry all of the appropriations involved in this change, particularly when the hydropower turbine is in use.

7. THAT there are three (3) intervening points of diversion between the point of diversion of the Buffalo Water Wagon Pipe Line and Ditch and the record point of diversion of the Pipe Line Ditch. These three (3) intervening points of diversion are for the following facilities:
   - Fort McKinney Ditch
   - Veteran Supply Ditch
   - Shreve Ditch

8. THAT consents from all of the owners of the three (3) intervening facilities was not obtained.

9. THAT there are no intervening tributaries or other sources of supply which might affect the rights of other appropriators.

10. THAT this amended petition was referred to a public hearing in accordance with Section 41-3-114, W.S. 1977, at Buffalo, Wyoming, on March 26, 1997, conducted by the Superintendent of Water Division No. II. Due and legal notice of the time and place of the hearing was given in all respects as required by law. No protest to this amended petition was registered at the hearing or subsequent thereto.

11. THAT properly prepared maps accompanied the amended petition.

12. THAT the granting of this amended petition will not cause injury to other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said amended petition.
The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and the amended petition should be granted.

ORDER

IT IS FURTHER ORDERED THAT this amended petition be and the same is GRANTED without loss of priority and subject to the condition that the changes shall not adversely affect the rights of other appropriators in good standing at the time the changes are made.

IT IS FURTHER ORDERED THAT the petitioner be allowed a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\1\4 of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\1\4 of said Section 6. The lands for which this change is allowed are described as follows:

Township 50 North, Range 82 West
Section 3: NE\1\4

Township 51 North, Range 82 West
Section 26: SW\1\4
Section 27: SE\1\4
Section 34: E\1\4
Section 35: W\1\4

IT IS FURTHER ORDERED THAT the petitioner be allowed an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\1\4 of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\1\4 of said Section 6:
a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

THAT the petitioner must notify the water commissioner 24 hours in advance of its intention to use the alternate point of diversion.
DONE AT TORRINGTON, COUNTY OF GOSHEN, STATE OF WYOMING, THIS 13TH DAY OF MAY 1997.

STATE BOARD OF CONTROL

ATTEST:

GORDON W. FASSETT, PRESIDENT

ALLAN CUNNINGHAM, EX-OFFICIO SECRETARY

ENTERED: APRIL 9, 1999
Permit 23403D
Secondary Supply of 100 Ac-ft of Water
Stored in Willow Park Reservoir
THE STATE OF WYOMING
Certificate of Appropriation of Water

WHEREAS, the City of Buffalo has presented to the Board of Control of the State of Wyoming proof of the appropriation of water from (Natural Flow of Clear Creek in exchange for an equal amount of water stored and released from Snowy Range Reservoir under Permit No. 23403) through the Buffalo Water Wagon Pipeline and Ditch for municipal purposes being in Johnson County, Wyoming.

NOW KNOW YE, That the State Board of Control, under the provisions of the Statutes of Wyoming, has, by an order duly made and entered on the 30th day of July, A.D. 1971, in Order Record No. 19, Page 47, determined and established the priority and amount of such appropriation as follows:

Name of Appropriator: City of Buffalo

Date of Appropriation: November 21, 1968

Amount of Appropriation: None

Secondary Supply: None

Description of land for which this appropriation is determined and established:

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<tr>
<th>TWP.</th>
<th>RANGE</th>
<th>SEC.</th>
<th>NE 1/4</th>
<th>NW 1/4</th>
<th>SW 1/4</th>
<th>SE 1/4</th>
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<tbody>
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<td>NE %</td>
<td>NW %</td>
<td>SW %</td>
<td>SE %</td>
<td>NE %</td>
</tr>
</tbody>
</table>

Please see attached sheet for land description and for limitations applying to this appropriation.

For change in point of diversion see O.R. 29, p. 323.

For additional means of conveyance see O.R. 32, p. 323.

For alternate point of diversion see O.R. 49, p. 323.

R. G. SEC. Sec. 6-50-82

The right to water hereby confirmed and established is limited to irrigation municipal use and the use is restricted to the place where acquired and to the purpose for which acquired. Rights for irrigation are to be based one cubic foot of water per second for each square foot of land for which the appropriation is herein determined and established, except when there is a surplus of water in the stream as provided by Sections 6-51-10 to 109-110-109-82 Wyo. Statutes 1971.

IN TESTIMONY WHEREOF, I, FLOYD A. BISHOP, President of the State Board of Control, have hereunto set my hand this 30th day of July, A.D. 1971, and caused the seal of said Board to be hereunto affixed.

Attest: [Signature]
Ex-officio Secretary.
IN THE MATTER OF THE AMENDED PETITION FOR CHANGE OF POINT OF DIVERSION AND MEANS OF CONVEYANCE OF THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 19276, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE PIPE LINE DITCH, WITH PRIORITY OF DECEMBER 7, 1939; TO BE CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH;

AND AN ALTERNATE POINT OF DIVERSION FOR THE FOLLOWING APPROPRIATIONS:

A. PART OF THE CITY OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH, WITH PRIORITY OF 1879;

B. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER NO. 4 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF APRIL 1883;

C. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER NOS. 1 AND 3 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF SPRING 1883;

D. THE TOWN OF BUFFALO APPROPRIATION (AS SUCCESSOR TO BUFFALO MILL COMPANY), TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO MILL DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF JUNE 1, 1887;

E. THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 23403, WATER STORED IN WILLOW PARK RESERVOIR (PERMIT NO. 6408 RES.), DELIVERED THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH, WITH PRIORITY OF NOVEMBER 21, 1968.
FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations or portions of the appropriations involved as evidenced by Certificates of Appropriation issued by the State Board of Control.

2. THAT the appropriations involved are as follows:

a. The City of Buffalo Appropriation, Permit No. 19276, adjudicated under Proof No. 22573, in the amount of 2.0 c.f.s. for domestic, municipal, industrial and irrigation purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Pipe Line Ditch, with priority of December 7, 1939, and of record in Order Record 10, Page 174; Certificate Record 57, Page 343;

b. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;
d. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

  e. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

  f. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

3. THAT by and through its amended petition, the petitioner requested a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\SE\ of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\NE\ of said Section 6. The lands for which this change is requested are described as follows:

   **Township 50 North, Range 82 West**
   - Section 3: N\NE\ 1
   - Section 6: SW\NW\ 1, W\SW\ 1
   - Section 26: S\SW\N\ 1, W\SW\ 1
   - Section 27: S\NE\ 1, SE\ 1
   - Section 34: E\ 1
   - Section 35: W\ 1

   **Township 51 North, Range 82 West**
   - Section 26: SW\NW\ 1, W\SW\ 1
4. THAT by and through its amended petition, the petitioner requested an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\textsuperscript{1}NW\textsuperscript{1} of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\textsuperscript{1}NE\textsuperscript{1} of said Section 6:

a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 5408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.
5. THAT the reason for the requested change of point of diversion and means of conveyance is that hydraulic conditions at the existing diversion make measurement and administration of this appropriation difficult. The existing diversion often becomes blocked with sediment and trash and is becoming increasingly difficult and expensive to maintain. The requested change will allow a more efficient and economical use of this appropriation.

6. THAT the reason for the requested alternate point of diversion and means of conveyance is that the existing pipeline from the City of Buffalo's diversion dam to the new water treatment and hydropower plant does not have the capacity to carry all of the appropriations involved in this change, particularly when the hydropower turbine is in use.

7. THAT there are three (3) intervening points of diversion between the point of diversion of the Buffalo Water Wagon Pipe Line and Ditch and the record point of diversion of the Pipe Line Ditch. These three (3) intervening points of diversion are for the following facilities:

   Fort McKinney Ditch
   Veteran Supply Ditch
   Shreve Ditch

8. THAT consents from all of the owners of the three (3) intervening facilities was not obtained.

9. THAT there are no intervening tributaries or other sources of supply which might affect the rights of other appropriators.

10. THAT this amended petition was referred to a public hearing in accordance with Section 41-3-114, W.S. 1977, at Buffalo, Wyoming, on March 26, 1997, conducted by the Superintendent of Water Division No. II. Due and legal notice of the time and place of the hearing was given in all respects as required by law. No protest to this amended petition was registered at the hearing or subsequent thereto.

11. THAT properly prepared maps accompanied the amended petition.

12. THAT the granting of this amended petition will not cause injury to other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said amended petition.
The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and the amended petition should be granted.

ORDER

IT IS FURTHER ORDERED THAT this amended petition be and the same is GRANTED without loss of priority and subject to the condition that the changes shall not adversely affect the rights of other appropriators in good standing at the time the changes are made.

IT IS FURTHER ORDERED THAT the petitioner be allowed a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\(^4\)SE\(^2\) of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\(^4\)NE\(^2\) of said Section 6. The lands for which this change is allowed are described as follows:

Township 50 North, Range 82 West
Section 3: NE\(^4\)NE\(^2\)

Township 51 North, Range 82 West
Section 26: SW\(^2\)NW\(^2\)
Section 27: SW\(^2\)NE\(^2\)
Section 34: E\(^2\)
Section 35: W\(^2\)

IT IS FURTHER ORDERED THAT the petitioner be allowed an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\(^4\)NW\(^2\) of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\(^4\)NE\(^2\) of said Section 6:
a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

THAT the petitioner must notify the water commissioner 24 hours in advance of its intention to use the alternate point of diversion.
DONE AT TORRINGTON, COUNTY OF GOSHEN, STATE OF WYOMING, THIS 13TH DAY OF MAY 1997.

STATE BOARD OF CONTROL

ATTEST:

GORDON W. FASSETT, PRESIDENT

ENTRERED: APRIL 9, 1999

ALLAN CUNNINGHAM, EX-OFFICIO SECRETARY
PETITION TO ADD AN ADDITIONAL MEANS OF CONVEYANCE TO THE FOLLOWING APPROPRIATIONS:


D. THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER, WHICH IS A TRIBUTARY OF THE YELLOWSTONE RIVER THROUGH THE BUFFALO MILL DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF JUNE 1, 1887.


PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, RICHARD W. DOUGLASS, 46 NORTH MAIN, BUFFALO, WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 18, 1987 with the following results:
FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriation involved as evidenced by the Certificates of Appropriation issued by the Wyoming State Board of Control and the fact that the water rights in question and for which a change in point of diversion and additional means of conveyance is requested are within the corporate limits of the Town of Buffalo.

2. THAT the appropriations involved are as follows:
   a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879 and of record in Order Record 3, page 150; Certificate Record 3, page 410.
   b. The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883 and of record in Order Record 4, page 609; Certificate Record 34, page 99.
   c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883 and of record in Order Record 3, page 150; Certificate Record 3, page 408.
   d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. with a priority of June 1, 1887 and of record in Order Record 19, page 100; Certificate Record 70, page 69.
   e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s., water stored in Willow Park Reservoir, Permit No. 6408 Res., in the total amount of 100 acre-feet with a priority of November 21, 1968 and of record in Order Record 19, page 47; Certificate Record 70, page 25.

3. THAT currently the appropriations involved are diverted from Clear Creek at a point South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situated in the SEERNE of said Section 10. From this point water is conveyed by the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo’s holding ponds and treatment facilities and then conveyed by the Buffalo Water Transmission Lines to the city’s distribution system. A portion of the water, as treated, irrigates lands that are now baseball fields and a golf course for which the water does not need to be treated. The use of water on these parcels of land also causes low pressures within the city’s distribution system. The City now proposes to allow water from the treatment ponds to overflow into Clear Creek and be conveyed down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diverts from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situated in the SEERSE of said Section 5. At this point the untreated water will be conveyed through the pipe line to irrigate the lands now covered under the baseball fields and the golf course, thus avoiding use of treated water on these lands.
4. THAT the lands that would be watered and/or irrigated by the water changed to this pipe line are described as follows:

   Township 50 North, Range 82 West
   Section 3: NE\(\frac{1}{4}\)NW\(\frac{1}{4}\)
   W\(\frac{1}{4}\)NW\(\frac{1}{4}\)

   Township 51 North, Range 82 West Dep. Resurvey
   Section 27: SE\(\frac{1}{4}\)SW\(\frac{1}{4}\)
   Lot 12
   Section 34: NE\(\frac{1}{4}\)SW\(\frac{1}{4}\)
   Sec\(\frac{1}{4}\)
   Lots 3, 7, and 8
   Section 35: Lot 6

5. THAT there are two intervening points of diversion between the point of discharge into the North Branch of Clear Creek and the point of diversion of the Pipe Line Ditch, Permit No. 19276. These are: Ft. McKinney Ditch and the Veteran Supply Ditch.

6. THAT consent from the owners of these ditches accompanied the petition.

7. THAT a properly prepared map showing the point of diversion as now used by the City and the proposed point of diversion of the raw water pipe line accompanied the petition.

8. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

1. The State Board of Control has jurisdiction both to consider the petitioner's request for an additional means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

2. The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to means of conveyance and the petition should be granted.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.
IT IS FURTHER ORDERED THAT the petitioner be allowed an additional means of conveyance for part of the following appropriations:

a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879.

b. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883.

c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883.

d. The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s. water stored in Willow Park Reservoir, Permit No. 6438 Res. with a priority of November 21, 1968.

That when needed, the city be allowed to divert these appropriations from Clear Creek at a point South 63° 09' 25" West, 3108.5 distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situate in the SE\NE\SE\SW of said Section 10, and convey that water through the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo's holding ponds and treatment facilities and release water from the holding pond into the North Branch of Clear Creek and convey that water down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diverts from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE\SW\SE\NW of said Section 5. The water as diverted through this pipe line will be untreated water for the irrigation of lands known as the City's parks and golf course, more particularly described as follows:

Township 50 North, Range 82 West
Section 3: NE\SW\SE\NW

Township 51 North, Range 82 West Dep. Resurvey
Section 27: SE\SW\Lot 12
Section 34: NE\SW\SE\SW\Lots 3, 7, and 8
Section 35: Lot 6
DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 18TH DAY OF MAY, 1987.

STATE BOARD OF CONTROL

[Signature]
GORDON W. FASSETT, PRESIDENT

ATTEST:

[Signature]
FRANCIS A. CARR, ADJUDICATION OFFICER

ENTERED: June 15, 1988
IN THE MATTER OF THE PETITION FOR CHANGE IN POINT OF DIVERSION OF THE FOLLOWING APPROPRIATIONS:


THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER THROUGH THE SNIDER MILL DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF JUNE 1, 1897.


PETITIONER: CITY OF BUFFALO, ACTING THROUGH ITS MAYOR, MR. EMIL G. HECHT OF BUFFALO, COUNTY OF JOHNSON, STATE OF WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on November 28, 1984, with the following results:

FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations for which a change in point of diversion is sought.
2. THAT the appropriations for which a change in point of diversion is sought are described as follows:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879, and of record in Order Record 3, page 150; Certificate Record 3, page 410. (The remainder of the appropriation was previously changed to the Carville & Lobban Ditch and is unaffected by this petition.)

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snake No. 4 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 4, page 609; Certificate Record 34, page 99.

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snake Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 3, page 150; Certificate Record 3, page 408.

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887, and of record in Order Record 19, page 100; Certificate Record 70, page 69.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968, and of record in Order Record 19, page 47; Certificate Record 70, page 25.

All of the above listed appropriations are used for municipal purposes within the city limits of the Town of Buffalo.

3. THAT the petitioner requested a change in point of diversion of the Buffalo Water Wagon Pipe Line and Ditch from its record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situate in the SE\NE\E\ of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the SE\NW\ of said Section 10.

4. THAT the reason for the requested change is that the present point of diversion is located at a site which freezes up during the winter months and prevents full diversion to meet the City's water demands. Further, recreational activity along Clear Creek above the present point of diversion threatens the purity of the water. The proposed new point of diversion is above this activity and would enable the pipeline to convey the water more efficiently and prevent possible contamination of the water.
5. THAT there are numerous points of diversion between the existing point of diversion of the Buffalo Water Wagon Pipe Line and the proposed point of diversion of the Buffalo Water Wagon Pipe Line.

6. THAT consent was obtained from part but not all of the owners of rights of the intervening points of diversion; therefore, this matter was referred to the Superintendent of Water Division No. II for a public hearing.

7. THAT in accordance with Section 41-3-114, W.S. 1977, a public hearing was held on November 1, 1984, at the Johnson County Courthouse, Buffalo, Wyoming. This hearing was held before the Superintendent of Water Division No. II.

8. THAT due and legal notice of the time and place of the hearing was served upon all interested parties by certified mail, return receipt requested.

9. THAT no valid protest to this petition was registered at this hearing or subsequent thereto.

10. THAT there are no intervening tributaries or other sources of supply which would affect the rights of other appropriators.

11. THAT a properly prepared map accompanied the petition.

12. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change in point of diversion and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change in point of diversion and the petition should be granted.

Due and proper notice of the time and place of the hearing was given in all respects.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.

IT IS FURTHER ORDERED THAT the petitioner be allowed to change the point of diversion of the following appropriations from their record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6,
Township 50 North, Range 82 West, and situate in the SE t NE ¼ of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the SE ¼ NW ¼ of said Section 10:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879.

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider No. 4 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year).

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of Spring 1883, (water to be used only during the period of May 16 through September 15 of each year).

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968.

A summary of the rights changed is as follows:

The City of Buffalo appropriation, Territorial Appropriation, Proof No. 4840, with a priority of 1879... 3.00 c.f.s.

The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841, with a priority of April 1883... 0.43 c.f.s.

The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4844, with a priority of Spring 1883... 0.52 c.f.s.
The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126, with a priority of June 1887.

The City of Buffalo appropriation, Proof No. 29786, Permit No. 23403, with a priority of November 1968, 100 acre-feet at a rate of 2.0 c.f.s.

IT IS FURTHER ORDERED THAT a proper metering device which is readily accessible to state personnel be installed just below the diversion of the pipeline.

DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 28TH DAY OF NOVEMBER, 1984.

STATE BOARD OF CONTROL

GEORGE L. CHRISTOPULOS, PRESIDENT

ATTEST:

GORDON W. FASSETT, EX-OFFICIO SECRETARY

ENTERED: October 29, 1985
SECTION OF ROCK CREEK & PINEY RESERVOIR & DITCH CO. CANAL

SECTION OF BUFFALO WATER WAGON PIPELINE & DITCH

CUTLINE OF SURVEY
STATE OF WYOMING
COUNTY OF JOHNSON

CERTIFICATE OF SURVEY

To accompany application for a secondary permit

APPROPRIATING THE NATURAL FLOW OF CLEAR CREEK THROUGH THE BUFFALO WATER WAGON PIPELINE & DITCH IN LIEU OF AN EQUAL AMOUNT OF STORED WATER FROM WILLOW PARK RESERVOIR TO BE DISCHARGED IN TO CLEAR CREEK AT THE MOUTH OF ROCK CREEK VIA THE SOUTH FORK OF SOUTH PINEY CREEK, THE ROCK CREEK AND PINEY RESERVOIR AND DITCH COMPANY'S CANAL AND ROCK CREEK.

APPLICANT
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This appropriation is limited to 100 acre-feet and the rate of diversion and exchange is limited to 2 cubic feet of water per second of time. No exchange of water will be allowed under this permit except when water is legally available for such exchange and when it can be made without injury to other appropriators, for the following described lands:

POINTS OF USE DESCRIBED BELOW ARE WITHIN CORPORATE LIMITS OF CITY OF BUFFALO:

Secondary Supply of water stored in Willow Fork Reservoir, Permit No. 6408 Res., supplied from South Fork of South Piney Creek, tributary Piney Creek. The natural flow of Clear Creek will be diverted in exchange for an equal amount of stored water released from Willow Fork Reservoir, Permit No. 6408 Res. as provided in Section 41-24, Wyoming Statutes 1957.

Water owned by the Permittee in the Willow Fork Reservoir, Permit No. 6408 Res., will be released into the South Fork of South Piney Creek, thence diverted through the Rock Creek and Piney Reservoir and Ditch Company Canal into Rock Creek, thence down Rock Creek into Clear Creek below the point of diversion and point of use by the City of Buffalo. The District Water Commissioner and Water Division Superintendent are to be notified in advance of such diversion so that the record may be kept of the amount diverted under this appropriation. The District Water Commissioner must be notified in writing each year in advance of the exchange granted by this permit as provided by Section 41-24, Wyoming Statutes 1957, and delivery of this water shall be under the direct supervision of the Water Commissioner.
Proof 2126

Buffalo Mill Ditch
AMENDED

THE STATE OF WYOMING
Certificate of Appropriation of Water

WHEREAS, the Buffalo Mill Company, original appropriator, has presented to the Board of Control the State of Wyoming proof of the appropriation of water from Clear Creek, Tributary Powder River through the Buffalo Mill (as changed to Buffalo Water Wagon Pipe Line and Ditch) Ditch under Permit No. Territorial Appropriation for Municipal purposes in the names of the owners thereof, shown in Johnson County, Wyoming.

NOW KNOW YE, That the State Board of Control, under the provisions of the Statutes of Wyoming, has, by an order duly made and entered on the 73rd day of August, 1971, in Order Record No. 19 Page 100, determined and established the priority and amount of such appropriation as follows:

Name of Appropriator: Town of Buffalo; Postoffice Address: Buffalo, Wyoming;
Date of Appropriation: June 1, 1887; Total Acreage: None;
Amount of Appropriation: 4.0 cu. ft. per sec.; Description of land appropriated for which this appropriation is determined and established:

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<th>TWP</th>
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THIS AMENDMENT TO BE USED FOR MUNICIPAL PURPOSES WITHIN THE CITY LIMITS OF THE TOWN OF BUFFALO.

For change in point of diversion see O.R. 29, p. 349.
For additional means of conveyance see O.R. 29, p. 329.
For alternate point of diversion of this appropriation, see O.R. 49, page 238.

The right to water hereby confirmed and established is limited to MUNICIPAL purposes and the use is restricted to the place where acquired and to the purpose for which acquired; unless the appropriator shall provide the whole of water per second for each cubic foot of water used or for any other appropriation to be heretofore established, except what may be necessary for water in the stream as provided by Section 29 of the Wyoming Statutes, 1897.

IN TESTIMONY WHEREOF, I, FLOYD A. BISHOP, President of the State Board of Control, have hereunto set my hand this 23rd day of August, 1971, and caused the seal of said Board to be hereunto affixed.

Attest: Ex-officio Secretary.
IN THE MATTER OF THE AMENDED PETITION FOR CHANGE OF POINT OF
DIVERSION AND MEANS OF CONVEYANCE OF THE CITY OF BUFFALO
APPROPRIATION, PERMIT NO. 19276, DIVERTING FROM CLEAR CREEK,
TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE
PIPE LINE DITCH, WITH PRIORITY OF DECEMBER 7, 1939; TO BE
CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH;

AND AN ALTERNATE POINT OF DIVERSION FOR THE FOLLOWING
APPROPRIATIONS:

A. PART OF THE CITY OF BUFFALO APPROPRIATION, TERRITORIAL
APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER
RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO WATER
WAGON PIPE LINE AND DITCH, WITH PRIORITY OF 1879;

B. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION,
TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY
POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER
NO. 4 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON
PIPE LINE AND DITCH), WITH PRIORITY OF APRIL 1883;

C. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION,
TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY
POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER
NOS. 1 AND 3 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER
WAGON PIPE LINE AND DITCH), WITH PRIORITY OF SPRING 1883;

D. THE TOWN OF BUFFALO APPROPRIATION (AS SUCCESSOR TO BUFFALO
MILL COMPANY), TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR
CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER,
THROUGH THE BUFFALO MILL DITCH (AS PREVIOUSLY CHANGED TO THE
BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF
JUNE 1, 1887;

E. THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 23403, WATER
STORED IN WILLOW PARK RESERVOIR (PERMIT NO. 6408 RES.),
DELIVERED THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH,
WITH PRIORITY OF NOVEMBER 21, 1968.
STATE BOARD OF CONTROL ORDER RECORD NO. 49, PAGE 393

(O.R. 10, P. 174; C.R. 57, P. 343; PROOF NO. 22573)
(O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840)
(O.R. 4, P. 609; C.R. 34, P. 99; PROOF NO. 4841)
(O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844)
(O.R. 19, P. 100; C.R. 70, P. 69; PROOF NO. 2126)
(O.R. 19, P. 47; C.R. 70, P. 25; PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, NELS LOFGREN, 46 NORTH MAIN STREET, BUFFALO, COUNTY OF JOHNSON, STATE OF WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 13, 1997, with the following results:

FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations or portions of the appropriations involved as evidenced by Certificates of Appropriation issued by the State Board of Control.

2. THAT the appropriations involved are as follows:

   a. The City of Buffalo Appropriation, Permit No. 19276, adjudicated under Proof No. 22573, in the amount of 2.0 c.f.s. for domestic, municipal, industrial and irrigation purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Pipe Line Ditch, with priority of December 7, 1939, and of record in Order Record 10, Page 174; Certificate Record 57, Page 343;

   b. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

   c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;
d. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

e. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

f. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

3. THAT by and through its amended petition, the petitioner requested a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\SE\ of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\SE\ of said Section 6. The lands for which this change is requested are described as follows:

Township 50 North, Range 82 West
Section 3: N\NE\NE

Township 51 North, Range 82 West
Section 26: SW\SE\SW
Section 27: S\SE\SE
Section 34: E\E
Section 35: W\W
4. THAT by and through its amended petition, the petitioner requested an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\NW\ of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\NE\ of said Section 6:

a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 5408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.
5. THAT the reason for the requested change of point of diversion and means of conveyance is that hydraulic conditions at the existing diversion make measurement and administration of this appropriation difficult. The existing diversion often becomes blocked with sediment and trash and is becoming increasingly difficult and expensive to maintain. The requested change will allow a more efficient and economical use of this appropriation.

6. THAT the reason for the requested alternate point of diversion and means of conveyance is that the existing pipeline from the City of Buffalo's diversion dam to the new water treatment and hydropower plant does not have the capacity to carry all of the appropriations involved in this change, particularly when the hydropower turbine is in use.

7. THAT there are three (3) intervening points of diversion between the point of diversion of the Buffalo Water Wagon Pipe Line and Ditch and the record point of diversion of the Pipe Line Ditch. These three (3) intervening points of diversion are for the following facilities:
   Fort McKinney Ditch
   Veteran Supply Ditch
   Shreve Ditch

8. THAT consents from all of the owners of the three (3) intervening facilities was not obtained.

9. THAT there are no intervening tributaries or other sources of supply which might affect the rights of other appropriators.

10. THAT this amended petition was referred to a public hearing in accordance with Section 41-3-114, W.S. 1977, at Buffalo, Wyoming, on March 26, 1997, conducted by the Superintendent of Water Division No. II. Due and legal notice of the time and place of the hearing was given in all respects as required by law. No protest to this amended petition was registered at the hearing or subsequent thereto.

11. THAT properly prepared maps accompanied the amended petition.

12. THAT the granting of this amended petition will not cause injury to other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said amended petition.
The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and the amended petition should be granted.

ORDER

IT IS FURTHER ORDERED THAT this amended petition be and the same is GRANTED without loss of priority and subject to the condition that the changes shall not adversely affect the rights of other appropriators in good standing at the time the changes are made.

IT IS FURTHER ORDERED THAT the petitioner be allowed a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\textsubscript{4}SE\textsubscript{1} of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\textsubscript{3}NE\textsubscript{4} of said Section 6. The lands for which this change is allowed are described as follows:

- **Township 50 North, Range 82 West**
  - Section 3: N\textsubscript{4}NE\textsubscript{4}
- **Township 51 North, Range 82 West**
  - Section 26: SW\textsubscript{4}NW\textsubscript{4}
  - W\textsubscript{4}SW\textsubscript{4}
  - Section 27: SE\textsubscript{4}NE\textsubscript{4}
  - SE\textsubscript{4}
  - Section 34: E\textsubscript{4}
  - Section 35: W\textsubscript{4}

IT IS FURTHER ORDERED THAT the petitioner be allowed an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\textsubscript{4}NW\textsubscript{4} of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\textsubscript{4}NE\textsubscript{4} of said Section 6.
a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

THAT the petitioner must notify the water commissioner 24 hours in advance of its intention to use the alternate point of diversion.
DONE AT TORRINGTON, COUNTY OF GOSHEN, STATE OF WYOMING, THIS 13TH DAY OF MAY 1997.

STATE BOARD OF CONTROL

ATTEST:

GORDON W. FASSETT, PRESIDENT

ALLAN CUNNINGHAM, EX-OFFICIO SECRETARY

ENTERED: APRIL 9, 1999
PETITION TO ADD AN ADDITIONAL MEANS OF CONVEYANCE TO THE FOLLOWING APPROPRIATIONS:


D. THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER, WHICH IS A TRIBUTARY OF THE YELLNOWSTONE RIVER THROUGH THE SNIDER NO. 1 AND 3 DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF JUNE 1, 1887.


(O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840)

(O.R. 4, P. 609; C.R. 34, P. 99; PROOF NO. 4841)

(O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844)

(O.R. 19, P. 100; C.R. 70, P. 69; PROOF NO. 2126)

(O.R. 19, P. 47; C.R. 70, P. 25; PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, RICHARD W. DOUGLASS, 46 NORTH MAIN, BUFFALO, WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 18, 1987 with the following results:
FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriation involved as evidenced by the Certificates of Appropriation issued by the Wyoming State Board of Control and the fact that the water rights in question and for which a change in point of diversion and additional means of conveyance is requested are within the corporate limits of the Town of Buffalo.

2. THAT the appropriations involved are as follows:
   a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879 and of record in Order Record 3, page 150; Certificate Record 3, page 410.
   b. The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883 and of record in Order Record 4, page 609; Certificate Record 34, page 99.
   c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s., for municipal purposes with a priority of Spring, 1883 and of record in Order Record 3, page 150; Certificate Record 3, page 408.
   d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. with a priority of June 1, 1887 and of record in Order Record 19, page 100; Certificate Record 70, page 69.
   e. The City of Buffalo appropriation, Permit No. 29786, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s., water stored in Willow Park Reservoir, Permit No. 6408 Rev., in the total amount of 100 acre-feet with a priority of November 21, 1968 and of record in Order Record 19, page 47; Certificate Record 70, page 25.

3. THAT currently the appropriations involved are diverted from Clear Creek at a point South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situate in the SW 1/4 of said Section 10. From this point water is conveyed by the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo's holding ponds and treatment facilities and then conveyed by the Buffalo Water Transmission Lines to the city's distribution system. A portion of the water, as treated, irrigates lands that are now baseball fields and a golf course for which the water does not need to be treated. The use of water on these parcels of land also causes low pressures within the city's distribution system. The City now proposes to allow water from the treatment ponds to overflow into Clear Creek and be conveyed down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diverts from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE 1/4 of said Section 5. At this point the untreated water will be conveyed through the pipe line to irrigate the lands now covered under the baseball fields and the golf course, thus avoiding use of treated water on these lands.
4. THAT the lands that would be watered and/or irrigated by the water changed to this pipe line are described as follows:

Township 50 North, Range 82 West
Section 3: NE 1/4 SW 1/4

Township 51 North, Range 82 West, Dep. Resurvey
Section 27: SE 1/4 SW 1/4
Lot 12
Section 34: NE 1/4 SW 1/4
SE 1/4
Lots 3, 7, and 8
Section 35: Lot 6

5. THAT there are two intervening points of diversion between the point of discharge into the North Branch of Clear Creek and the point of diversion of the Pipe Line Ditch, Permit No. 19276. These are: Ft. McKinney Ditch and the Veteran Supply Ditch.

6. THAT consent from the owners of these ditches accompanied the petition.

7. THAT a properly prepared map showing the point of diversion as now used by the City and the proposed point of diversion of the raw water pipe line accompanied the petition.

8. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

1. The State Board of Control has jurisdiction both to consider the petitioner's request for an additional means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

2. The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to means of conveyance and the petition should be granted.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.
IT IS FURTHER ORDERED THAT the petitioner be allowed an additional means of conveyance for part of the following appropriations:

a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879.

b. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883.

c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883.

d. The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s. water stored in Willow Park Reservoir, Permit No. 6438 Res. with a priority of November 21, 1968.

That when needed, the city be allowed to divert these appropriations from Clear Creek at a point South 63° 09' 25" West, 3108.5 distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situate in the SE\(^2\)SW\(^1\) of said Section 10, and convey that water through the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo's holding ponds and treatment facilities and release water from the holding pond into the North Branch of Clear Creek and convey that water down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diverts from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE\(^2\)SE\(^1\) of said Section 5. The water as diverted through this pipe line will be untreated water for the irrigation of lands known as the City's parks and golf course, more particularly described as follows:

**Township 50 North, Range 82 West**

**Section 3:** NE\(^2\)NW\(^1\)

**Township 51 North, Range 82 West Dep. Resurvey**

**Section 27:** SE\(^2\)SW\(^1\)

**Section 34:** NE\(^2\)SW\(^1\)

**Section 35:** Lots 3, 7, and 8

**Lot 6**
DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 18TH DAY OF MAY, 1987.

STATE BOARD OF CONTROL

[Signature]

GORDON W. FASSETT, PRESIDENT

ATTEST:

FRANCIS A. CARR, ADJUDICATION OFFICER

ENTERED: June 15, 1988
IN THE MATTER OF THE PETITION FOR CHANGE IN POINT OF DIVERSION OF THE FOLLOWING APPROPRIATIONS:


THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER THROUGH THE BUFFALO MILL DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF JUNE 1, 1897.


PETITIONER: CITY OF BUFFALO, ACTING THROUGH ITS MAYOR, MR. EMIL O. HECHT OF BUFFALO, COUNTY OF JOHNSON, STATE OF WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on November 28, 1984, with the following results:

FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations for which a change in point of diversion is sought.
2. THAT the appropriations for which a change in point of diversion is sought are described as follows:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879, and of record in Order Record 3, page 150; Certificate Record 3, page 410. (The remainder of the appropriation was previously changed to the Carville & Lobban Ditch and is unaffected by this petition.)

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 4, page 609; Certificate Record 34, page 99.

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 3, page 150; Certificate Record 3, page 408.

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887, and of record in Order Record 19, page 100; Certificate Record 70, page 69.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968, and of record in Order Record 19, page 47; Certificate Record 70, page 25.

All of the above listed appropriations are used for municipal purposes within the city limits of the Town of Buffalo.

3. THAT the petitioner requested a change in point of diversion of the Buffalo Water Wagon Pipe Line and Ditch from its record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situate in the S E 1/4 of Section 6, to a new point diverting from the same source and described as South 53° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 82 West, and situate in the S E 1/4 of said Section 10.

4. THAT the reason for the requested change is that the present point of diversion is located at a site which freezes up during the winter months and prevents full diversion to meet the City's water demands. Further, recreational activity along Clear Creek above the present point of diversion threatens the purity of the water. The proposed new point of diversion is above this activity and would enable the pipeline to convey the water more efficiently and prevent possible contamination of the water.
5. THAT there are numerous points of diversion between the existing point of diversion of the Buffalo Water Wagon Pipe Line and the proposed point of diversion of the Buffalo Water Wagon Pipe Line.

6. THAT consent was obtained from part but not all of the owners of rights of the intervening points of diversion; therefore, this matter was referred to the Superintendent of Water Division No. II for a public hearing.

7. THAT in accordance with Section 41-3-114, W.S. 1977, a public hearing was held on November 1, 1984, at the Johnson County Courthouse, Buffalo, Wyoming. This hearing was held before the Superintendent of Water Division No. II.

8. THAT due and legal notice of the time and place of the hearing was served upon all interested parties by certified mail, return receipt requested.

9. THAT no valid protest to this petition was registered at this hearing or subsequent thereto.

10. THAT there are no intervening tributaries or other sources of supply which would affect the rights of other appropriators.

11. THAT a properly prepared map accompanied the petition.

12. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change in point of diversion and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change in point of diversion and the petition should be granted.

Due and proper notice of the time and place of the hearing was given in all respects.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.

IT IS FURTHER ORDERED THAT the petitioner be allowed to change the point of diversion of the following appropriations from their record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6,
Township 50 North, Range 82 West, and situate in the SE\(^2\)NE\(^2\) of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the SE\(^2\)NE\(^2\) of said Section 10:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879.

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider No. 4 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year).

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of Spring 1883, (water to be used only during the period of May 16 through September 15 of each year).

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968.

A summary of the rights changed is as follows:

- The City of Buffalo appropriation, Territorial Appropriation, Proof No. 4840, with a priority of 1879, 3.00 c.f.s.
- The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841, with a priority of April 1883, 0.43 c.f.s.
- The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4844, with a priority of Spring 1883, 0.52 c.f.s.
The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126, with a priority of June 1887

<br />
The City of Buffalo appropriation, Proof No. 29786, Permit No. 23403, with a priority of November 1968, 100 acre-feet at a rate of 2.0 c.f.s.

<br />
IT IS FURTHER ORDERED THAT a proper metering device which is readily accessible to state personnel be installed just below the diversion of the pipeline.

<br />
DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 29TH DAY OF NOVEMBER, 1984.

<br />
STATE BOARD OF CONTROL

<br />
GEORGE L. CHRISTOPULOS, PRESIDENT

<br />
ATTEST:

<br />
GORDON W. FASSETT, EX-OFFICIO SECRETARY

<br />
ENTERED: October 29, 1985
IN THE MATTER OF THE PETITION OF THE
CITY OF BUFFALO, FOR CHANGE IN POINT
OF DIVERSION AND MEANS OF CONVEYANCE
OF PART OF AN APPROPRIATION OF WATER
FROM CLEAR CREEK, THROUGH THE BUFFALO
WATER PIPE LINE, UNDER TERRITORIAL
PERMIT, WITH PRIORITY OF 1879 (O. R.
3, P. 101, O. R. 3, P. 410) TO THE
CARDWELL-LOBAN DITCH, WITHOUT LOSS
OF PRIORITY.

IN WATER DIVISION NO. TWO.

FINDINGS AND ORDER

THIS MATTER coming regularly before the State Board of Control, this the 16th day of November, 1933, the Board FINDS:

That the petitioner, sets forth under the oath of its duly authorized Mayor, that it is the sole owner of an appropriation of water, in the amount of four (4) cubic feet per second of time, from Clear Creek, through the Buffalo Water Pipe Line, for irrigation, domestic and manufacturing purposes, with priority of 1879;

That the petitioner requests a change in point of diversion and means of conveyance of part of said appropriation of water from said pipe line, to the Cardwell-Loban Ditch, for the purpose of irrigating the Willow Grove Cemetery;

That the petitioner furnishes evidence of ownership of an interest in the Cardwell-Loban Ditch;

That satisfactory documentary evidence, of the ownership of the lands involved, accompanies the petition;

That maps in duplicate, prepared by a licensed engineer, showing the existing situation on the ground, accompany the petition;

That the consent of the owners of all intervening appropriations, to the proposed change, accompanies the petition;

That it appears that no other appropriator will be injured by the proposed change.

The Board now being advised by the records of the office of the State Board of Control and the showings presented in support of the petition, THEREFORE ORDERS:

That the petition be GRANTED;

That the petitioner, the City of Buffalo, be permitted to change the point of diversion and means of conveyance of an appropriation of water, in the amount of 1.64 cubic feet per second of time, from Clear Creek, through the Buffalo Water Pipe Line, with priority of 1879, to the Cardwell-Loban Ditch, with headgate located N. 73° 13' W., 2187 feet distant from the SE corner of Section 4, T. 50 N., R. 88 W., for the irrigation of the Willow Grove Cemetery, being described as follows: S6.46 A. Lot 5; 26.28 A. Lot 6; 1869 A. Lot 7 and 30.69 A. Lot 8; Sec. 3, T. 50 N., R. 88 W., said change to be granted without loss of priority and subject to the condition that the rights of other appropriators shall not be injured.

IN WITNESS WHEREOF, the President of the State Board of Control has hereunto set his hand this 16th day of November, 1933.

STATE BOARD OF CONTROL

BY

EDWIN W. ROBERTS,
President.

ATTEN

Supervising Secretary.

ENTERED January 26, 1934.
Clear Creek
petition of City of Buffalo

Div. 3.
Petition for change of point of division
Comes now the City of Buffalo by its Mayor &c., Boards of trustees, why this its petition filed herein shows, that it has succeeded to all the rights of the Buffalo Ice & Wool Company in and to the water right from Clear Creek through the Mill ditch, the headgate of which is located 16° 20' 8. 123 E. 123' C. from the I. P. and S. of the Mill ditch and appropriation amounting to 150 cfs for one.

But said City of Buffalo has constructed a system of water works, and a pipe line, the intake of which is located 16° 59' 14. 663' N. from the L. C. of the Mill ditch and 150 cfs for one. And has prayed for the better use and distribution of the said appropriation of water for municipal purposes. Petition prays that it may be allowed to change the point of diversion of said original appropriation through the said Mill ditch, to the present point of intake for said pipe line as stated above.

After consideration of said petition, it satisfactorily appears that the rights of appropriation on the stream will not be injuriously affected. It is therefore Ordered that said petition be, and the same hereby granted.

And the Secretary is directed to make the proper entries on the record.

(Mason Creek petition of Belle Fourche
petition of W. P. Meek

Petition for reopening decree of adjudication on Belle Fourche

Div. 2
Petition under Chap. 67, Sec. 67, Laws 1907.

This matter came regularly on for hearing before the Board in the petition of W. P. Meek claiming to be the appropriator of water from Mason Creek a tributary of Belle Fourche River in the above described which said petition alleges that said petitioners is the owner of certain lands in Custer County, that he also owns the certain ditch known as the Mason Creek Ditch, built to irrigate said lands, and claims a water right through the same; therefore, that the said ditch was constructed and the water of said stream was beneficially appropriated and used on said lands by said petitioners to Joe M. Mathers, long before the admission of this state to the Union, and long prior to the adoption of the present water laws; that no beneficial use was made of the same prior to the time of the adoption of the present water laws; that no beneficial use was made of the same prior to the time of the adoption of the present water laws; that said petitioners are, or any member thereof, or attempted to do, that therefrom is not in the records of the Board of Control any record a water right for said lands. Petition therefore prays that the Decree feature.
STATE OF WYOMING
COUNTY OF LARAMIE

On this 14th day of November, A.D. 1923, the undersigned, citizens of the Town of Buffalo, Wyoming, being duly sworn, make this map to accompany petition for change in point of diversion and means of conveyance of water from headgate of Buffalo water pipe line to headgate of Carwile and Lobban ditch. Petitioner: Town of Buffalo. Scale two inches = one mile.

Registration No. 102.

[Map diagram with various placenames and coordinates.]
The Findings of Fact contain the elements necessary to comply with Sections 41-10.4 and 41-215, Wyoming Statutes 1957, pertaining to change of point of diversion and amended certificates, respectively, and those portions of the petition should be granted.

ORDER

It is hereby ordered that the petition be, and the same is GRANTED, without loss of priority, subject to the condition that the rights of other appropriators shall not be injured.

It is further ordered that the proper records be amended to reflect the point of diversion for the Buffalo Water Wagon Pipe Line and Ditch as S. 40° 50' W., 1943 feet from the northeast corner of Section 6, Township 50 North, Range 82 West and situated in the SE1/4 of said Section 6.

It is further ordered that by this Order the Board of Control does affirm the Order of the Board of Control dated March 14, 1902, which designated the Town of Buffalo, as successor in interest to the Buffalo Mill Company, for the Buffalo Mill Company Appropriation, with the use of said appropriation being changed from Milling to Municipal, and that as a sign of this affirmation an amended certificate be issued, as requested by the Town of Buffalo, reducing this right to 4.0 c.f.s. Said Certificate to read as follows:

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Record Book</th>
<th>Page</th>
<th>Proof No.</th>
<th>Permit No.</th>
<th>Name of Ditch</th>
<th>Name of Appropriate</th>
<th>Post Office</th>
<th>Date of Appropriation</th>
<th>Use for Wh. Water Appropriated</th>
<th>Ant. of Appropriation C.F.S.</th>
<th>No. of Acres</th>
<th>Description of Lands</th>
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</thead>
<tbody>
<tr>
<td>70</td>
<td>69</td>
<td>2126</td>
<td>Terr.</td>
<td></td>
<td>Buffalo Mill Ditch (as changed to Buffalo Water Wagon Pipe Line and Ditch)</td>
<td>Town of Buffalo (as successor to Buffalo Mill Company, original appropriator)</td>
<td>Buffalo, Wyoming</td>
<td>June 1, 1887</td>
<td>Municipal</td>
<td>4.0</td>
<td></td>
<td>This appropriation to be used for Municipal purposes within the City Limits of the Town of Buffalo</td>
</tr>
</tbody>
</table>

For change in point of diversion see O.R. 27, p. 344.

For additional means of conveyance see O.R. 38, p. 334.

The alternate point of diversion of the Buffalo Mill Company Appropriation, see O.R. 50, page 352.

Done at Cheyenne, County of Laramie, State of Wyoming, this 13th day of May 1971.

STATE BOARD OF CONTROL

[Signature]

FLYD BISHOF, PRESIDENT

ATTEST:

[Signature]

GEORGE L. CHRISTOPHOS, EX-OFFICIO SECRETARY

ENTERED: August 23, 1971
PETITION FOR AFFIRMATION OF A PREVIOUS ACTION BY THE BOARD OF CONTROL; FOR AN AMENDED CERTIFICATE AND TO CONNECT THE POINT OF DIVERSION

PETITIONER: THE TOWN OF BUFFALO, JOHNSON COUNTY, WYOMING, ACTING THROUGH ITS MAYOR, SAM ROSENTHAL.

This matter was considered by the State Board of Control at its regular meeting on 13 May 1971, with the following results:

FINDINGS OF FACT

1. The Board of Control has jurisdiction to consider the Petitioner's request for (1) affirmation of a previous action by the Board of Control (2) issuance of an amended certificate of appropriation and (3) correction of point of diversion, and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

2. The Town of Buffalo owns the water right involved in this petition by virtue of an agreement with the Buffalo Mill Company, a copy of which accompanies the petition.

3. The appropriation involved is the Buffalo Mill Company Appropriation, Territorial Appropriation, which diverts from Clear Creek, tributary Powder River through the Buffalo Mill Company Ditch, priority June 1, 1887, and as of record in Order Record 2, Page 186, Proof No. 2126 originally adjudicated for 40 c.f.s. for Milling use. The record point of diversion for this appropriation was changed to a pipeline diverting at a point located 5.670 H., 16,632 feet from the southeast corner of Section 26, Township 51 North, Range 82 West and in the NW\(\frac{1}{4}\) of Section 5, Township 50 North, Range 82 West, by a petition to the Board of Control by the Town of Buffalo. The Board granted this petition and also at the same time changed the use for the appropriation from Milling to Municipal, with the amount of water remaining at 40 c.f.s. (Minute Record 3, Page 334).

4. Petitioner requests affirmation that this March 14, 1902 Order of the Board remains valid and that the Town of Buffalo, as successor in interest to the Buffalo Mill Company, has a valid appropriation of record for 40 c.f.s. for Municipal use.

Petitioner states that only a portion of this appropriation has been and is being used to supply the water needs of the Town of Buffalo, the Town having other rights from Clear Creek used for Municipal purposes. Petitioner requests that the 40 c.f.s. under the Buffalo Mill Company Appropriation be reduced to 4 c.f.s. and that an amended certificate be issued to the Town of Buffalo reflecting this change.

Petitioner further states that the correct point of diversion of the Town's system, the Buffalo Water Wagon Pipe Line and Ditch, from Clear Creek is S. 40° 50' W., 1943 feet from the northeast corner of Section 6, Township 50 North, Range 82 West and situated in the SW\(\frac{1}{4}\) of said Section 6. Petitioner seeks to amend the record to reflect this point of diversion and thereby correct an error which has existed for many years.

5. There are no intervening head gates or tributaries and no other sources of supply.

6. A properly prepared map accompanied the petition.

7. The proposed correction of the point of diversion has been field checked by the Division Superintendent of Water Division No. Two and, in his opinion, the request appears sensible and logical and without apparent harm to any other appropriators.

CONCLUSIONS OF LAW

There appears to be no reason why this Board of Control should not affirm the Order of the Board dated March 14, 1902, establishing the Town of Buffalo, as successors in interest to the Buffalo Mill Company, and that portion of this petition should be granted.
<table>
<thead>
<tr>
<th>No.</th>
<th>Name of Ditch</th>
<th>Name of Approprietor</th>
<th>P.O. Address</th>
<th>Date of Application</th>
<th>Use to Which Water is Applied</th>
<th>Amount Appropriated Co. &amp; Per Sec.</th>
<th>Amount Previously Appropriated</th>
<th>No. Acres Irrigated</th>
<th>Description of Lands Irrigated</th>
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<tr>
<td>186</td>
<td>Des Moines 1st App.</td>
<td>Des Moines Cattle Co.</td>
<td>Buffalo, Wyo</td>
<td>Sept. 15, 1884</td>
<td>Irrigation</td>
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<td>200</td>
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<td>SOLD Sec. 22, MOL, Sec. 28, T. 52 N., R. 81 W.</td>
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<td>187</td>
<td>Crown</td>
<td>Julius C. Oliver</td>
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<td>2.28</td>
<td>160</td>
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<tr>
<td>188</td>
<td></td>
<td>Edward H. &amp; John F. Adams</td>
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<td>Edward D. Metcalf</td>
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<td>191</td>
<td>Matt</td>
<td>Peter C. Matt</td>
<td></td>
<td>Nov. 1884</td>
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<tr>
<td>192</td>
<td>Six Mile Co.</td>
<td>Wyo. Land &amp; Cattle Co.</td>
<td></td>
<td>April 20, 1885</td>
<td></td>
<td>7.98</td>
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<td>193</td>
<td>2nd App.</td>
<td>Des Moines Cattle Co.</td>
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<td>8.86</td>
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<td>194</td>
<td>North Fork &amp; French Cr.</td>
<td>Alfred T. Bacon</td>
<td>Denver, Colo</td>
<td>Dec. 31, 1885</td>
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<td>Robert Foote</td>
<td>Buffalo, Wyo</td>
<td>Dec. 31, 1885</td>
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<td>1.43</td>
<td>100</td>
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<td>199</td>
<td>Four Lakes &amp; French Cr.</td>
<td>Martin L. Whaley</td>
<td></td>
<td>June 1, 1886</td>
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<td>3.00</td>
<td>150</td>
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<td>Part of Sec. 23, T. 51 N.; Lots 1, 2 &amp; 3, MOL, Sec. 7, MOL, Sec. 18, MOL, Sec. 23, T. 50 N., R. 82 W.</td>
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<td>40.00</td>
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Proof 4840

Buffalo Water Wagon and Pipeline Ditch
CERTIFICATE RECORD,

THE STATE OF WYOMING.

CERTIFICATE OF APPROPRIATION OF WATER.

WHEREAS, The City of Buffalo has presented to the Board of Control of the State of Wyoming proof of the appropriation of water from Clear Creek through the Buffalo Water Wagon Ditch, Ditch under Permit No. for irrigation of the lands herein described, lying and being in Johnson County, Wyoming, and for Irrigation Domestic Manufacturing.

NOW KNOW YE, That the Board of Control, under the provisions of Division I, Title 9, Chapters 10 and 14 of the Revised Statutes of Wyoming, 1897, has, by an order duly made and entered on the 18th day of January, A.D. 1904, in Order Record No. 150, determined and established the priority and amount of such appropriation, as follows:

Name of Appropiator, The City of Buffalo
Post-office Address, Buffalo, Wyoming
General Priority Number on main stream and tributaries;
Priority Number on Clear Creek A 2,
Amount of Appropriation, 414 cu. ft. per sec.; Date of Appropriation, 1897;
Description of land to be irrigated, and for which this appropriation is determined and established Municipal Purposes

For change in point of diversion and means of conveyance for this appropriation see O.R. 17, Page 647.
To Carnile - Lohsen Ditch

For change in point of diversion and means of conveyance for part of appropriation to Buffalo Water Pipeline, see O.R. 13, P. 87.

For change in point of diversion see O.R. 29, P. 334.
For additional means of conveyance see O.R. 32, P. 334.
For Alternate Point of Diversion of a portion of this appropriation, see O.R. 49, Page 398.

The right to water hereby confirmed and established is limited to irrigation and the use is restricted to the place where acquired and to the purpose for which acquired; rights for irrigation not to exceed one cubic foot per second for each seventy acres of land for which appropriation is herein determined and established.

IN TESTIMONY WHEREOF, I, Clarence S. Johnson, President of the State Board of Control, have hereunto set my hand this 15th day of January, A.D. 1904, and caused the seal of said Board to be hereunto affixed.

President.

Attorn: Tommy Rose, Secretary.
from the Darwin-Loebel Ditch, diverting water from Clear Creek in the SW 1/4, Section 4, Township 60 North, Range 82 West, to the Buffalo Water Pipe Line diverting water from Clear Creek at a point located South 24° 37' West 2862 feet from the North Quarter Section Corner of Section 6, Township 60 North, Range 82 West;

THAT said change be granted without loss of priority, subject to the condition that the rights of other appropriators shall not be injured.

DURE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING, THIS 18TH DAY OF MAY, 1964.

STATE BOARD OF CONTROL

ATTEST:

EARL LLOYD, Ex-officio Secretary.

ENTERED: September 22, 1964
IN THE MATTER OF THE PETITION OF THE CITY OF BUFFALO, WYOMING
FOR CHANGE IN POINT OF DIVERSION AND MEANS OF CONVEYANCE OF
PART OF AN APPROPRIATION OF WATER FROM CLEAR CREEK, TRIBUTARY
OF POWDER RIVER, WITH优先权 OF 1879, PROPERLY CHANGED TO
THE CARVILLE-LOBAN DITCH, TO THE BUFFALO WATER PIPE LINE.

IN WATER DIVISION NUMBER TWO

ORDER RECORD No. 13--STATE BOARD OF CONTROL

THIS MATTER coming regularly before the State Board of Control this 15th day of May, 1904, the Board FINDS:

THAT Cyrus C. Blair, Mayor of the City of Buffalo, Wyoming, sets forth under oath that the City of Buffalo is the sole owner of part of an appropriation of water from Clear Creek, tributary of Powder River, with priority of 1879, previously changed to the Carville-Loban Ditch (O.R. 3, P. 161; C.R. 7, P. 647; C.R. 3, P. 410; Proof 4860) and of all the lands irrigated thereby;

THAT the petitioner requests permission to change the point of diversion and means of conveyance of that part of said appropriation of water for irrigation, domestic, manufacturing and municipal purposes on 36.96 Ac. Lot 8 and 5.05 Ac. Lot 6, Section 3, Township 50 North, Range 82 West, from the Carville-Loban Ditch, diverting water from Clear Creek at a point in the DIVERSION, Section 4, Township 50 North, Range 82 West, to the Buffalo Water Pipe Line diverting water from Clear Creek at a point South 26° 30' West 2862 feet from the North Quarter Section Corner of Section 6, Township 50 North, Range 82 West;

THAT the reason for the proposed change is that the water has been used at the Buffalo Cemetery and the City of Buffalo is now in need of more water for municipal use through its pipe line;

THAT there are five intervening headgates between the present and proposed points of diversion and the consents of the owners were not obtained;

THAT the petition came before the State Board of Control for consideration on November 12, 1903 and since it was not accompanied by the consents of the other appropriators through the Carville-Loban Ditch and the consents of the owners of the intervening ditches, namely, the Ladd Ditch, Crowell Ditch, Six Mile Ditch, Johnson Ditch, Johnson County Farm Ditch, Suhre Ditch and Fort McKinney Ditch, it was referred to Clyde H. Wood, Superintendent of Division No. Two, for public notice and hearing;

THAT advertisement of a hearing, to be held at the Johnson County Court House in Buffalo, Wyoming, at ten o'clock A.M., January 4, 1904, was published by the Superintendent of Water Division No. Two in "The Buffalo Bulletin" on December 24, 1903;

THAT a hearing was held at the time and place set forth in the public notice, at which Cyrus C. Blair, Mayor of the City of Buffalo, and J. C. Thom, owner of the Johnson County Farm Ditch, appeared, but no objections were offered;

THAT a map, prepared by a registered engineer and land surveyor and showing the situation, accompanies the petition;

THAT a certificate of the County Clerk of Johnson County, showing the City of Buffalo to be part owner of the lands involved, accompanies the petition.

The Board, having considered the petition and being advised by the records of the office of the State Board of Control and the showings presented in the matter, THEREFORE ORDERS:

THAT the petition be GRANTED;

THAT the petitioner, the City of Buffalo, Wyoming, be permitted to change the point of diversion and means of conveyance of that part of the appropriation of water from Clear Creek, tributary of Powder River, with priority of 1879, which had previously been changed to the Carville-Loban Ditch (O.R. 3, P. 161; C.R. 7, P. 647; C.R. 3, P. 410; Proof 4860) for use upon the following lands: 36.96 Ac. Lot 8

8.05 Ac. Lot 6, Section 3, Township 50 North, Range 82 West
ORDER RECORD 7 STATE BOARD OF CONTROL


FINDINGS AND ORDER

IN WATER DIVISION NO. TWO.

THIS MATTER coming regularly before the State Board of Control, this the 16th day of November, 1933, the Board FINDS:

That the petitioner, acting under the authority of its duly authorized Mayor, that it is the sole owner of an appropriation of water, in the amount of four (4) cubic feet per second of time, from Clear Creek, through the Buffalo Water Pipe Line, for irrigation, domestic and manufacturing purposes, with priority of 1879;

That the petitioner requests a change in point of diversion and means of conveyance of part of said appropriation of water from said pipe line, to the Carwile-Loban Ditch, for the purpose of irrigating the Willow Grove Cemetery;

That the petitioner furnishes evidence of ownership of an interest in the Carwile-Loban Ditch;

That satisfactory documentary evidence, of the ownership of the lands involved, accompanies the petition;

That maps in duplicate, prepared by a licensed engineer, showing the existing situation on the ground, accompany the petition;

That the consent of the owners of all intervening appropriations, to the proposed change, accompanies the petition;

That it appears that no other appropriator will be injured by the proposed change.

The Board now being advised by the records of the office of the State Board of Control and the showings presented in support of the petition, THEREFORE ORDERS:

That the petition be GRANTED;

That the petitioner, the City of Buffalo, be permitted to change the point of diversion and means of conveyance of an appropriation of water, in the amount of 1.64 cubic feet per second of time, from Clear Creek, through the Buffalo Water Pipe Line, with priority of 1879, to the Carwile-Loban Ditch, with headgate located N. 71° 33' W., 2187 feet distant from the SE corner of Section 4, T. 50 N., R. 80 W., for the irrigation of the Willow Grove Cemetery, being described as follows: S6. 35 A. Lot 5, 26.38 A. Lot 6, 13.01 A. Lot 7 and 35.69 A. Lot 8, Sec. 3, T. 50 N., R. 80 W., said change to be granted without loss of priority and subject to the condition that the rights of other appropriators shall not be injured.

IN WITNESS WHEREOF, the President of the State Board of Control has hereunto set his hand this 16th day of November, 1933.

STATE BOARD OF CONTROL

BY

EDWIN W. ROBERTS
President.

ATTEND:

[Signature]

[Signature]

[Signature]

[Date]
IN THE MATTER OF THE AMENDED PETITION FOR CHANGE OF POINT OF
DIVERSION AND MEANS OF CONVEYANCE OF THE CITY OF BUFFALO
APPROPRIATION, PERMIT NO. 19276, DIVERTING FROM CLEAR CREEK,
TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE
PIPE LINE DITCH, WITH PRIORITY OF DECEMBER 7, 1939; TO BE
CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH;

AND AN ALTERNATE POINT OF DIVERSION FOR THE FOLLOWING
APPROPRIATIONS:

A. PART OF THE CITY OF BUFFALO APPROPRIATION, TERRITORIAL
APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER
RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO WATER
WAGON PIPE LINE AND DITCH, WITH PRIORITY OF 1879;

B. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION,
TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY
POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER
NO. 4 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON
PIPE LINE AND DITCH), WITH PRIORITY OF APRIL 1883;

C. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION,
TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY
POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER
NOS. 1 AND 3 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER
WAGON PIPE LINE AND DITCH), WITH PRIORITY OF SPRING 1883;

D. THE TOWN OF BUFFALO APPROPRIATION (AS SUCCESSOR TO BUFFALO
MILL COMPANY), TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR
CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER,
THROUGH THE BUFFALO MILL DITCH (AS PREVIOUSLY CHANGED TO THE
BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF
JUNE 1, 1887;

E. THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 23403, WATER
STORED IN WILLOW PARK RESERVOIR (PERMIT NO. 6408 RES.),
DELIVERED THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH,
WITH PRIORITY OF NOVEMBER 21, 1968.
(O.R. 10, P. 174; C.R. 57, P. 343; PROOF NO. 22573)
O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840
O.R. 4, P. 609; C.R. 34, P. 99; PROOF NO. 4841
O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844
O.R. 19, P. 100; C.R. 70, P. 69; PROOF NO. 2126
O.R. 19, P. 47; C.R. 70, P. 25; PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, NELS LOFGREN, 46 NORTH MAIN STREET, BUFFALO, COUNTY OF JOHNSON, STATE OF WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 13, 1997, with the following results:

**FINDINGS OF FACT**

1. THAT the petitioner is the owner of the appropriations or portions of the appropriations involved as evidenced by Certificates of Appropriation issued by the State Board of Control.

2. THAT the appropriations involved are as follows:
   a. The City of Buffalo Appropriation, Permit No. 19276, adjudicated under Proof No. 22573, in the amount of 2.0 c.f.s. for domestic, municipal, industrial and irrigation purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Pipe Line Ditch, with priority of December 7, 1939, and of record in Order Record 10, Page 174; Certificate Record 57, Page 343;

   b. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

   c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;
d. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

e. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

f. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

3. THAT by and through its amended petition, the petitioner requested a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\SE\ of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\NE\ of said Section 6. The lands for which this change is requested are described as follows:

**Township 50 North, Range 82 West**

- Section 3: N\NE\1
- Section 26: SW\NW\1
- Section 27: S\NE\1
- Section 34: E\1
- Section 35: W\1

**Township 51 North, Range 82 West**

- Section 26: SW\NW\1
- Section 27: S\NE\1
- Section 34: E\1
- Section 35: W\1
4. THAT by and through its amended petition, the petitioner requested an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 63 West, and situated in the SE\NW\ of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\NE\ of said Section 6:

a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 5408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1966, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.
5. THAT the reason for the requested change of point of diversion and means of conveyance is that hydraulic conditions at the existing diversion make measurement and administration of this appropriation difficult. The existing diversion often becomes blocked with sediment and trash and is becoming increasingly difficult and expensive to maintain. The requested change will allow a more efficient and economical use of this appropriation.

6. THAT the reason for the requested alternate point of diversion and means of conveyance is that the existing pipeline from the City of Buffalo's diversion dam to the new water treatment and hydropower plant does not have the capacity to carry all of the appropriations involved in this change, particularly when the hydropower turbine is in use.

7. THAT there are three (3) intervening points of diversion between the point of diversion of the Buffalo Water Wagon Pipe Line and Ditch and the record point of diversion of the Pipe Line Ditch. These three (3) intervening points of diversion are for the following facilities:

   Fort McKinney Ditch
   Veteran Supply Ditch
   Shreve Ditch

8. THAT consents from all of the owners of the three (3) intervening facilities was not obtained.

9. THAT there are no intervening tributaries or other sources of supply which might affect the rights of other appropriators.

10. THAT this amended petition was referred to a public hearing in accordance with Section 41-3-114, W.S. 1977, at Buffalo, Wyoming, on March 26, 1997, conducted by the Superintendent of Water Division No. II. Due and legal notice of the time and place of the hearing was given in all respects as required by law. No protest to this amended petition was registered at the hearing or subsequent thereto.

11. THAT properly prepared maps accompanied the amended petition.

12. THAT the granting of this amended petition will not cause injury to other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said amended petition.
The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and the amended petition should be granted.

ORDER

IT IS FURTHER ORDERED THAT this amended petition be and the same is GRANTED without loss of priority and subject to the condition that the changes shall not adversely affect the rights of other appropriators in good standing at the time the changes are made.

IT IS FURTHER ORDERED THAT the petitioner be allowed a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE4SE4 of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE4NE4 of said Section 6. The lands for which this change is allowed are described as follows:

Township 50 North, Range 82 West
Section 3: NE4NE4

Township 51 North, Range 82 West
Section 26: SW4NW4
    W4SW4
Section 27: SW4NE4
    SE4
Section 34: E4
Section 35: W4

IT IS FURTHER ORDERED THAT the petitioner be allowed an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE4NW4 of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE4NE4 of said Section 6:
a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

THAT the petitioner must notify the water commissioner 24 hours in advance of its intention to use the alternate point of diversion.
DONE AT TORRINGTON, COUNTY OF GOSHEN, STATE OF WYOMING, THIS 13TH DAY OF MAY 1997.

STATE BOARD OF CONTROL

ATTEST:

GORDON W. FASSETT, PRESIDENT

ALLAN CUNNINGHAM, EX-OFFICIO SECRETARY

ENTERED: APRIL 9, 1999
PETITION TO ADD AN ADDITIONAL MEANS OF CONVEYANCE TO THE FOLLOWING APPROPRIATIONS:


D. THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER, WHICH IS A TRIBUTARY OF THE YELLOWSTONE RIVER THROUGH THE SNIDER MILL DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF JUNE 1, 1887.


(D.O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840)

O.R. 4, F. 609; C.R. 34, P. 99; PROOF NO. 4841

O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844

O.R. 19, P. 100; C.R. 70, P. 69; PROOF NO. 2126

O.R. 19, P. 47; C.R. 70, P. 25; (PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, RICHARD W. DOUGLASS, 66 NORTH MAIN, BUFFALO, WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 18, 1987 with the following results:
FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriation involved as evidenced by the Certificates of Appropriation issued by the Wyoming State Board of Control and the fact that the water rights in question and for which a change in point of diversion and additional means of conveyance is requested are within the corporate limits of the Town of Buffalo.

2. THAT the appropriations involved are as follows:
   a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879 and of record in Order Record 3, page 150; Certificate Record 3, page 410.
   b. The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883 and of record in Order Record 4, page 609; Certificate Record 34, page 99.
   c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883 and of record in Order Record 3, page 150; Certificate Record 3, page 408.
   d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. with a priority of June 1, 1887 and of record in Order Record 19, page 100; Certificate Record 70, page 69.
   e. The City of Buffalo appropriation, Permit No. 29786, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s., water stored in Willow Park Reservoir, Permit No. 6408 Res., in the total amount of 100 acre-feet with a priority of November 21, 1968 and of record in Order Record 19, page 47; Certificate Record 70, page 25.

3. THAT currently the appropriations involved are diverted from Clear Creek at a point South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situate in the SW\(\frac{1}{4}\) of said Section 10. From this point water is conveyed by the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo’s holding ponds and treatment facilities and then conveyed by the Buffalo Water Transmission Lines to the city’s distribution system. A portion of the water, as treated, irrigates lands that are now baseball fields and a golf course for which the water does not need to be treated. The use of water on these parcels of land also causes low pressures within the city’s distribution system. The City now proposes to allow water from the treatment ponds to overflow into Clear Creek and be conveyed down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diverges from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE\(\frac{1}{4}\)SE\(\frac{1}{4}\) of said Section 5. At this point the untreated water will be conveyed through the pipe line to irrigate the lands now covered under the baseball fields and the golf course, thus avoiding use of treated water on these lands.
4. THAT the lands that would be watered and/or irrigated by the water changed to this pipe line are described as follows:

Township 50 North, Range 82 West
Section 3: NE1/4NW1/4

Township 51 North, Range 82 West, Dep. Resurvey
Section 27: SE1/4SW1/4
Lot 12
Section 34: NE1/4SW1/4
Lot 12
Lot 3, 7, and 8
Section 35: Lot 6

5. THAT there are two intervening points of diversion between the point of discharge into the North Branch of Clear Creek and the point of diversion of the Pipe Line Ditch, Permit No. 19276. These are: Ft. McKinney Ditch and the Veteran Supply Ditch.

6. THAT consent from the owners of these ditches accompanied the petition.

7. THAT a properly prepared map showing the point of diversion as now used by the City and the proposed point of diversion of the raw water pipe line accompanied the petition.

8. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

1. The State Board of Control has jurisdiction both to consider the petitioner's request for an additional means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

2. The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to means of conveyance and the petition should be granted.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.
IT IS FURTHER ORDERED THAT the petitioner be allowed an additional means of conveyance for part of the following appropriations:

a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879.

b. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883.

c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883.

d. The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 209786 in the amount of 2.0 c.f.s. water stored in Willow Park Reservoir, Permit No. 6408 Res. with a priority of November 21, 1968.

That when needed, the city be allowed to divert these appropriations from Clear Creek at a point South 63° 09' 25" West, 3108.5 distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situate in the SE¼NW¼ of said Section 10, and convey that water through the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo's holding ponds and treatment facilities and release water from the holding pond into the North Branch of Clear Creek and convey that water down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diverts from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE¼SW¼ of said Section 5. The water as diverted through this pipe line will be untreated water for the irrigation of lands known as the City's parks and golf course, more particularly described as follows:

Township 50 North, Range 82 West
Section 3: NE¼NW¼
W½NW¼

Township 51 North, Range 82 West Dep. Resurvey
Section 27: SE¼SW¼
Lot 12

Section 34: NE¼SW¼
S½SW¼
Lots 3, 7, and 8

Section 35: Lot 6
DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 18TH DAY OF MAY, 1987.

STATE BOARD OF CONTROL

GORDON W. FASSETT, PRESIDENT

ATTEST:

FRANCIS A. CARR, ADJUDICATION OFFICER

ENTERED: June 15, 1988
IN THE MATTER OF THE PETITION FOR CHANGE IN POINT OF DIVERSION OF THE FOLLOWING APPROPRIATIONS:

PART OF THE CITY OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch with a priority of 1879.

PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, diverting from Clear Creek, a tributary of the Powder River through the Snider No. 4 Ditch as previously changed to the Buffalo Water Wagon Pipe Line and Ditch with a priority of April 1883.

PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch as previously changed to the Buffalo Water Wagon Pipe Line and Ditch with a priority of Spring 1883.

THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch as previously changed to the Buffalo Water Wagon Pipe Line and Ditch with a priority of June 1, 1897.


1. THAT the petitioner is the owner of the appropriations for which a change in point of diversion is sought.
2. THAT the appropriations for which a change in point of diversion is sought are described as follows:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879, and of record in Order Record 3, page 150; Certificate Record 3, page 410. (The remainder of the appropriation was previously changed to the Carville & Lobban Ditch and is unaffected by this petition.)

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 4, page 609; Certificate Record 34, page 99.

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of Spring 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 3, page 150; Certificate Record 3, page 408.

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887, and of record in Order Record 19, page 100; Certificate Record 70, page 69.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968, and of record in Order Record 19, page 47; Certificate Record 70, page 25.

All of the above listed appropriations are used for municipal purposes within the city limits of the Town of Buffalo.

3. THAT the petitioner requested a change in point of diversion of the Buffalo Water Wagon Pipe Line and Ditch from its record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situate in the SE\(\frac{1}{4}\)SE\(\frac{1}{4}\) of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the SE\(\frac{1}{4}\)NW\(\frac{1}{4}\) of said Section 10.

4. THAT the reason for the requested change is that the present point of diversion is located at a site which freezes up during the winter months and prevents full diversion to meet the City's water demands. Further, recreational activity along Clear Creek above the present point of diversion threatens the purity of the water. The proposed new point of diversion is above this activity and would enable the pipeline to convey the water more efficiently and prevent possible contamination of the water.
5. THAT there are numerous points of diversion between the existing point of diversion of the Buffalo Water Wagon Pipe Line and the proposed point of diversion of the Buffalo Water Wagon Pipe Line.

6. THAT consent was obtained from part but not all of the owners of rights of the intervening points of diversion; therefore, this matter was referred to the Superintendent of Water Division No. II for a public hearing.

7. THAT in accordance with Section 41-3-114, W.S. 1977, a public hearing was held on November 1, 1984, at the Johnson County Courthouse, Buffalo, Wyoming. This hearing was held before the Superintendent of Water Division No. II.

8. THAT due and legal notice of the time and place of the hearing was served upon all interested parties by certified mail, return receipt requested.

9. THAT no valid protest to this petition was registered at this hearing or subsequent thereto.

10. THAT there are no intervening tributaries or other sources of supply which would affect the rights of other appropriators.

11. THAT a properly prepared map accompanied the petition.

12. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change in point of diversion and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change in point of diversion and the petition should be granted.

Due and proper notice of the time and place of the hearing was given in all respects.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.

IT IS FURTHER ORDERED THAT the petitioner be allowed to change the point of diversion of the following appropriations from their record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6,
Township 50 North, Range 82 West, and situate in the SE\(4\) of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the SE\(4\) of said Section 10:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879.

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider No. 4 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year).

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of Spring 1883, (water to be used only during the period of May 16 through September 15 of each year).

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968.

A summary of the rights changed is as follows:

The City of Buffalo appropriation, Territorial Appropriation, Proof No. 4840, with a priority of 1879 ... 3.00 c.f.s.

The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841, with a priority of April 1883 ... 0.43 c.f.s.

The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4844, with a priority of Spring 1883 ... 0.52 c.f.s.
The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126, with a priority of June 1887

The City of Buffalo appropriation, Proof No. 29786, Permit No. 23403, with a priority of November 1968, 100 acre-feet at a rate of 2.0 c.f.s.

IT IS FURTHER ORDERED THAT a proper metering device which is readily accessible to state personnel be installed just below the diversion of the pipeline.

DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 28TH DAY OF NOVEMBER, 1984.

STATE BOARD OF CONTROL

GEORGE L. CHRISTOPULOS, PRESIDENT

ATTEST:

GORDON W. FASSETT, EX-OFFICIO SECRETARY

ENTERED: October 29, 1985
Proof 4841

Snider No. 4 Ditch
THE STATE OF WYOMING

CERTIFICATE OF APPROPRIATION OF WATER

WHEREAS, Farm Investment Company has presented to the Board of Control of the State of Wyoming proof of the appropriation of water from Clear Creek, a tributary of Powder River through the Snider No. 4 Ditch under Permit No. Terr., for irrigation of the lands herein described, lying and being in Johnson County, Wyoming.

NOW KNOW YE, That the Board of Control, under the provisions of Division 1, Title 9, Chapters 10 and 14 of the Revised Statutes of Wyoming, 1899, has, by an order duly made and entered on the 20th day of November, A.D. 1912, in Order Record No. 4, determined and established the priority and amount of such appropriation as follows:

Name of Appropriator: Farm Investment Company; Postoffice Address: Greeley, Colorado, Wyoming;

Amount of Appropriation: 2.07 cu. ft. per sec.; Date of Appropriation: April 1893;

Description of land to be irrigated and for which this appropriation is determined and established: Total Acreage - One hundred forty-five (145) acres.

<table>
<thead>
<tr>
<th>Sec. 25, Tr. 51, R. 92 W.</th>
<th>20 A.</th>
<th>N.W. 3/4</th>
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<tr>
<td>Sec. 25, Tr. 51, R. 92 W.</td>
<td>40 A.</td>
<td>S.W. 1/4</td>
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<tr>
<td>Sec. 25, Tr. 51, R. 92 W.</td>
<td>27 A.</td>
<td>S.E. 1/4</td>
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<tr>
<td>Sec. 25, Tr. 51, R. 92 W.</td>
<td>6 A.</td>
<td>E. 1/2</td>
</tr>
<tr>
<td>Sec. 36, Tr. 51, R. 92 W.</td>
<td>20 A.</td>
<td>N.W. 3/4</td>
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1.02 acre detached from irrigation.

The right to water hereby confirmed and established is limited to irrigation and the use is restricted to the place where acquired and to the purpose for which acquired; rights for irrigation not to exceed one cubic foot per second for each seventy acres of land for which appropriation is herein determined and established.

IN TESTIMONY WHEREOF, I, A. J. Parnell, President of the State Board of Control, have hereunto set my hand this 7th day of December, A. D. 1912, and caused the seal of said Board to be hereunto affixed.

ATTEST: Secretary

President.
PETITION TO ADD AN ADDITIONAL MEANS OF CONVEYANCE TO THE FOLLOWING APPROPRIATIONS:
D. THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER, WHICH IS A TRIBUTARY OF THE YELLOWSTONE RIVER THROUGH THE SNIDER MILL DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF JUNE 1, 1887.
O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840
O.R. 4, P. 609; C.R. 34, P. 99; PROOF NO. 4841
O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844
O.R. 19, P. 100; C.R. 70, P. 69; PROOF NO. 2126
O.R. 19, P. 47; C.R. 70, P. 25; PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, RICHARD W. DOUGLASS, 46 NORTH MAIN, BUFFALO, WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 18, 1987 with the following results:
FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriation involved as evidenced by the Certificates of Appropriation issued by the Wyoming State Board of Control and the fact that the water rights in question and for which a change in point of diversion and additional means of conveyance is requested are within the corporate limits of the Town of Buffalo.

2. THAT the appropriations involved are as follows:

   a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879 and of record in Order Record 3, page 150; Certificate Record 3, page 410.

   b. The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883 and of record in Order Record 4, page 609; Certificate Record 34, page 99.

   c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883 and of record in Order Record 3, page 150; Certificate Record 3, page 408.

   d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. with a priority of June 1, 1887 and of record in Order Record 19, page 100; Certificate Record 70, page 69.

   e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s., water stored in Willow Park Reservoir, Permit No. 6408 Res., in the total amount of 100 acre-feet with a priority of November 21, 1968 and of record in Order Record 19, page 47; Certificate Record 70, page 25.

3. THAT currently the appropriations involved are diverted from Clear Creek at a point South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 30 North, Range 83 West and situate in the SE^1/4 of said Section 10. From this point water is conveyed by the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo's holding ponds and treatment facilities and then conveyed by the Buffalo Water Transmission Lines to the city's distribution system. A portion of the water, as treated, irrigates lands that are now baseball fields and a golf course for which the water does not need to be treated. The use of water on these parcels of land also causes low pressures within the city's distribution system. The City now proposes to allow water from the treatment ponds to overflow into Clear Creek and be conveyed down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which divers from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 30 North, Range 82 West and situate in the NE^1/4 of said Section 5. At this point the untreated water will be conveyed through the pipe line to irrigate the lands now covered under the baseball fields and the golf course, thus avoiding use of treated water on these lands.
4. THAT the lands that would be watered and/or irrigated by the water changed to this pipe line are described as follows:

Township 50 North, Range 82 West
Section 3: NE\(\text{1/4}\)NW\(\text{1/4}\)

Township 51 North, Range 82 West Dep. Resurvey
Section 27: SE\(\text{1/4}\)SW\(\text{1/4}\)
Lot 12
Section 34: NE\(\text{1/4}\)SW\(\text{1/4}\)
Lot 12
Section 35: NE\(\text{1/4}\)

5. THAT there are two intervening points of diversion between the point of discharge into the North Branch of Clear Creek and the point of diversion of the Pipe Line Ditch, Permit No. 19276. These are: Ft. McKinney Ditch and the Veteran Supply Ditch.

6. THAT consent from the owners of these ditches accompanied the petition.

7. THAT a properly prepared map showing the point of diversion as now used by the City and the proposed point of diversion of the raw water pipe line accompanied the petition.

8. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

1. The State Board of Control has jurisdiction both to consider the petitioner’s request for an additional means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

2. The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to means of conveyance and the petition should be granted.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.
IT IS FURTHER ORDERED THAT the petitioner be allowed an additional means of conveyance for part of the following appropriations:

a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879.

b. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883.

c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883.

d. The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s. water stored in Willow Park Reservoir, Permit No. 6408 Res. with a priority of November 21, 1968.

That when needed, the city be allowed to divert these appropriations from Clear Creek at a point South 63° 09' 25" West, 3108.5 distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situate in the SE\(\frac{3}{4}\)NW\(\frac{1}{4}\) of said Section 10, and convey that water through the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo's holding ponds and treatment facilities and release water from the holding pond into the North Branch of Clear Creek and convey that water down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diverts from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE\(\frac{1}{4}\)SW\(\frac{1}{2}\) of said Section 5. The water as diverted through this pipe line will be untreated water for the irrigation of lands known as the City's parks and golf course, more particularly described as follows:

**Township 50 North, Range 82 West**

**Section 3:** NE\(\frac{3}{4}\)NW\(\frac{1}{4}\)

**Township 51 North, Range 82 West Dep. Resurvey**

**Section 27:** SE\(\frac{3}{4}\)SW\(\frac{1}{4}\)

Lot 12

**Section 34:** NE\(\frac{1}{2}\)SW\(\frac{1}{2}\)

Lots 3, 7, and 8

**Section 35:** Lot 6
DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 18TH DAY OF MAY, 1987.

STATE BOARD OF CONTROL

[Signature]
GORDON W. FASSETT, PRESIDENT

ATTEST:

FRANCIS A. CARR, ADJUDICATION OFFICER

ENTERED: June 15, 1988
IN THE MATTER OF THE PETITION FOR CHANGE IN POINT OF DIVERSION OF THE FOLLOWING APPROPRIATIONS:


THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER THROUGH THE BUFFALO MILL DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF JUNE 1, 1897.


(P.O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840)
(P.O.R. 4, P. 609; C.R. 34, P. 99; PROOF NO. 4841)
(P.O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844)
(P.O.R. 19, P. 100; C.R. 70, P. 69; PROOF NO. 2126)
(P.O.R. 19, P. 47; C.R. 70, P. 23; PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, ACTING THROUGH ITS MAYOR, MR. EMIL O. HECHT OF BUFFALO, COUNTY OF JOHNSON, STATE OF WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on November 28, 1984, with the following results:

FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations for which a change in point of diversion is sought.
2. THAT the appropriations for which a change in point of diversion is sought are described as follows:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879, and of record in Order Record 3, page 150; Certificate Record 3, page 410. (The remainder of the appropriation was previously changed to the Carville & Lobban Ditch and is unaffected by this petition.)

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider No. 4 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 4, page 609; Certificate Record 4, page 99.

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of Spring 1885, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 3, page 150; Certificate Record 3, page 408.

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887, and of record in Order Record 19, page 100; Certificate Record 70, page 69.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968, and of record in Order Record 19, page 47; Certificate Record 70, page 25.

All of the above listed appropriations are used for municipal purposes within the city limits of the Town of Buffalo.

3. THAT the petitioner requested a change in point of diversion of the Buffalo Water Wagon Pipe Line and Ditch from its record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situate in the NNE-half of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the NE-quarter of said Section 10.

4. THAT the reason for the requested change is that the present point of diversion is located at a site which freezes up during the winter months and prevents full diversion to meet the City's water demands. Further, recreational activity along Clear Creek above the present point of diversion threatens the purity of the water. The proposed new point of diversion is above this activity and would enable the pipeline to convey the water more efficiently and prevent possible contamination of the water.
5. THAT there are numerous points of diversion between the existing point of diversion of the Buffalo Water Wagon Pipe Line and the proposed point of diversion of the Buffalo Water Wagon Pipe Line.

6. THAT consent was obtained from part but not all of the owners of rights of the intervening points of diversion; therefore, this matter was referred to the Superintendent of Water Division No. II for a public hearing.

7. THAT in accordance with Section 41-3-114, W.S. 1977, a public hearing was held on November 1, 1984, at the Johnson County Courthouse, Buffalo, Wyoming. This hearing was held before the Superintendent of Water Division No. II.

8. THAT due and legal notice of the time and place of the hearing was served upon all interested parties by certified mail, return receipt requested.

9. THAT no valid protest to this petition was registered at this hearing or subsequent thereto.

10. THAT there are no intervening tributaries or other sources of supply which would affect the rights of other appropriators.

11. THAT a properly prepared map accompanied the petition.

12. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change in point of diversion and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change in point of diversion and the petition should be granted.

Due and proper notice of the time and place of the hearing was given in all respects.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.

IT IS FURTHER ORDERED THAT the petitioner be allowed to change the point of diversion of the following appropriations from their record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6,
Township 50 North, Range 82 West, and situate in the SE\(\frac{1}{4}\)NE\(\frac{1}{4}\) of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the SE\(\frac{1}{4}\)NE\(\frac{1}{4}\) of said Section 10:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879.

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider No. 4 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year).

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of Spring 1883, (water to be used only during the period of May 16 through September 15 of each year).

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968.

A summary of the rights changed is as follows:

The City of Buffalo appropriation, Territorial Appropriation, Proof No. 4840, with a priority of 1879 ... 3.00 c.f.s.

The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841, with a priority of April 1883 ... 0.43 c.f.s.

The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4844, with a priority of Spring 1883 ... 0.52 c.f.s.
The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126, with a priority of June 1887 ... 4.00 c.f.s.

The City of Buffalo appropriation, Proof No. 29786, Permit No. 23403, with a priority of November 1968, 100 acre-feet at a rate of 2.0 c.f.s. ... 2.00 c.f.s.

Total 9.95 c.f.s.

IT IS FURTHER ORDERED THAT a proper metering device which is readily accessible to state personnel be installed just below the diversion of the pipeline.

DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 28TH DAY OF NOVEMBER, 1984.

STATE BOARD OF CONTROL

GEORGE L. CHRISTOPULOS, PRESIDENT

ATTEST:

GORDON W. FASSETT, EX-OFFICIO SECRETARY

ENTERED: October 29, 1985
IN THE MATTER OF THE PETITIONS FOR CHANGE TO PREFERRED USE OF A PORTION OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, PROOF NO. 4844, PURSUIT, PURCHASE APRIL 1883; AND A PORTION OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, PROOF NO. 4841, PURSUIT, PURCHASE APRIL 1883, DIVERTING FROM CLEAR CREEK, TRIBUTARY FODER RIVER THROUGH THE SNIDER NO. 3 & 1 DITCH; AND THE SNIDER NO. 4 DITCH, RESPECTIVELY, FROM IRRIGATION TO PREFERRED USE FOR MUNICIPAL PURPOSES; AND TO CHANGE THE POINT OF DIVERSION AND MEANS OF CONVEYANCE OF THE APPROPRIATIONS SO CHANGED TO THE BUFFALO WATER RACING PIPELINE AND DITCH.

PETITIONER:

THE TOWN OF THE CITY OF BUFFALO, THROUGH ITS MAYOR SAM ROSENFELD, COUNTY OF JOHNSON, WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on 13 May 1976, with the following results:

FINDINGS OF FACT

1. The Board of Control has the jurisdiction both to consider the petitioner's request for change of use and change in point of diversion and means of conveyance; and to prepare and promulgate the Order hereinafter set forth disposing of said petitions.

2. The petitioner has secured Water Rights Deeds covering water rights on the portions of the appropriations described below and authorizing detachment of water rights from said lands. These Deeds are part of the petition record. Just compensation has been paid to the proper owner for such Deeds.

3. The appropriations involved both divert from Clear Creek, Tributary Foder River and are identified as follows:

   a. The Farm Investment Company Appropriation, Territorial Appropriation, through the Snider No. 3 & 1 Ditch, priority Spring 1883; and of record in Order Record 3, Page 151; Certificate Record 3, Page 406, Proof No. 4844; amended by Order Record 14, Page 448, for irrigation of the following lands:

   - Township 51 North, Range 82 West
     - Section 25
       - NE 1/4: 10.0 acres
       - SE 1/4: 10.0 acres
       - Total: 20.0 acres

   * Note: Order Record 14, Page 448 authorizes change in point of diversion and means of conveyance for irrigation of 18.0 acres in the NE 1/4 of Section 25, from the Snider No. 3 & 1 Ditch to the Snider No. 4 Ditch.

   b. The Farm Investment Company Appropriation, Territorial Appropriation, through the Snider No. 4 Ditch, priority April 1883; and of record in Order Record 3, Page 151; Certificate Record 3, Page 409; Proof No. 4841; amended by Order Record 4, Page 409; Certificate Record 34, Page 99, for irrigation of the following lands:

   - Township 51 North, Range 82 West
     - Section 25
       - NE 1/4: 20.0 acres
       - SE 1/4: 10.0 acres
       - Total: 30.0 acres

     - Section 36
       - NE 1/4: 10.0 acres
       - Total: 20.0 acres

   * Note: Order Record 4, Page 409, Certificate Record 34, Page 99, authorizes change in point of diversion and means of conveyance for irrigation of 18.0 acres in the NE 1/4 of Section 25, from the Snider No. 4 Ditch to the Snider No. 4 Ditch.
4. Petitioner desires to detach from the following described lands portions of the appropriations described above as follows:

   a. The Farm Investment Company Appropriation, Proof No. 4844.

<table>
<thead>
<tr>
<th>Township 51 North, Range 82 West</th>
<th>Ditch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 25: NE/4 50.0 acres</td>
<td>Snider No. 3 &amp; 1</td>
</tr>
<tr>
<td></td>
<td>21.40 ac Snider No. 3 &amp; 1 (as changed to Snider No. 4).</td>
</tr>
<tr>
<td>NW/4 20.0 acres</td>
<td>Snider No. 3 &amp; 1</td>
</tr>
<tr>
<td>Total 70.0 acres and 0.86 c.f.s.</td>
<td></td>
</tr>
</tbody>
</table>

   b. The Farm Investment Company Appropriation, Proof No. 4841.

<table>
<thead>
<tr>
<th>Township 51 North, Range 82 West</th>
<th>Ditch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 25: NE/4 20.00 acres</td>
<td>Snider No. 4</td>
</tr>
<tr>
<td>NW/4 20.52 acres</td>
<td>Snider No. 4</td>
</tr>
<tr>
<td>SE/4 27.00 acres</td>
<td>Snider No. 4</td>
</tr>
<tr>
<td>Total 71.42 acres and 1.02 c.f.s.</td>
<td></td>
</tr>
</tbody>
</table>

   Total of both appropriations to be changed to preferred use is 1.88 c.f.s. for 131.42 acres of which 0.59 c.f.s. for 44.40 acres are now under the Snider No. 3 & 1 Ditch and 1.29 c.f.s. for 90.02 acres are under the Snider No. 4 Ditch (including 0.27 c.f.s. for 18.60 acres previously changed from Snider No. 3 & 1 Ditch).

5. Petitioner proposes to change the use for the detached water rights from irrigation to preferred use for municipal purposes within the Town of the City of Buffalo. Petitioner further requests a change in point of diversion and means of conveyance for the rights so detached from their record points of diversion through the Snider No. 3 & 1 Ditch and the Snider No. 4 Ditch to the Buffalo Water Wagon Pipeline and Ditch, diverting from Clear Creek at a point located South 40° 50' West, 1943 feet from the Northeast corner of Section 6, Township 50 North, Range 82 West and situated in the SE 1/4 of said Section 6. Water so diverted through this facility will enter the municipal water distribution system. Petitioner states the additional water will be used during the summer months for irrigation of lawns and parks within the city limits.

6. These petitions were presented to the Board of Control during their regular meeting in November 1971, at which time they were referred to a public hearing. Said hearing was held at Buffalo, Wyoming on April 25, 1974. Due and legal notice of the time and place of the hearing was given in all respects as required by law.

7. During the hearing two protestsants testified, namely Mr. Lance Vanderheef and Mrs. Eva Anderson. Subsequent to the hearing both parties have signed consents to the petitions which are part of the record.

8. A return flow study was submitted as evidence during the hearing, said study being prepared by Tipton & Kalsboch, Inc., a firm practicing water resource engineering exclusively. This study indicated that the average historical period of use for both the Snider No. 3 & 1 Ditch and the Snider No. 4 Ditch was approximately May 1 through September 30 of each year. The Board feels that a more representative period of use for this area would be June 15 through September or 123 days.

9. This study further shows an annual consumptive use of 1.50 acre-feet per acre, to cover a cropping pattern of hay, irrigated pasture, and other crops grown in the area. For the 131.42 acres involved and 1.50 acre-feet per acre the annual demand would be 131.13 acre-feet (1.50 x 131.42 = 197.13). Converting this figure to second foot days computes as 99.41 (197.13 / 1.983 = 99.41). Using an annual diversion period of 16 May through 15 September amounting to 123 days this computes to 0.808 c.f.s. per day (123 / 99.41 = 0.808 c.f.s.) or rounded to 0.81 c.f.s. at a uniform rate over the entire period.

10. In addition to the consumptive use as computed above, the study also discussed other losses, defined as evaporation from the conveyance system, and transpiration by native vegetation along the ditch banks, evaporation and deep percolation. This amounted to 0.32 acre-feet per acre.
ORDER RECORD No. 21 --STATE BOARD OF CONTROL

(derived from column 4 of Tipton & Kailbach, Inc. Study as follows: 68.34 acre-feet = 0.52 acre-feet per acre). Using the same formulas as used in paragraph 10 above, a figure of 0.28 c.f.s. per day is obtained. 0.52 acre-feet x 131.62 acres = 68.34 acre-feet; \( \frac{68.34}{131.62} \), or 0.52 acre-feet per day. However, it was the board's feeling that these losses are difficult to assess but that some consideration could be given for losses that do not return to the stream and feel that the figure of 0.14 c.f.s. per day should be used. Therefore, the total allowable amount which would be detached would amount to 0.81 c.f.s. + 0.14 c.f.s. or a total of 0.95 c.f.s., diverting at a uniform rate for 123 days during the period 16 May through 15 September.

11. The board recognized that, in actual practice, a variation in monthly consumptive use occurs, due to variance in the amount of rainfall, hot or cool weather, etc., but felt that it would be impractical to make such a determination because of the small quantity of water involved.

12. There are 16 intervening ditches, including the Hart No. 3 Ditch, between the head gate of the Snider No. 4 Ditch and that of the Buffalo Water Wagon Pipeline and Ditch as well as 13 intervening ditches, including Hart No. 4 Ditch, between the head gate of the Snider No. 3 & 1 Ditch and the Buffalo Water Wagon Pipeline and Ditch. Comments to these petitions were not obtained from owners of these intervening ditches, and there was no evidence presented at the hearing to indicate that the owners of said ditches would be adversely affected or injured in any way by the change to preferred use and change in point of diversion and means of conveyance proposed.

13. There are no intervening sources of supply which will be adversely affected by these changes.

14. A properly prepared map accompanied the petition.

15. The proposed change of use and change in point of diversion and means of conveyance have been field checked by the Division Superintendent and, in his opinion, the requested changes appear sensible, logical and without apparent harm to any other appropriators.

CONCLUSIONS OF LAW

The findings of fact contain the elements necessary to comply with Section 41-4, Wyoming Statutes, pertaining to change of water rights from irrigation to preferred use for municipal purposes and petitions, as modified for amount of water authorized, should be granted.

ORDER

It is hereby ordered that these petitions be, and the same are GRANTED, as herein modified and subject to the condition that the changes and transfers as authorized below shall not adversely affect any existing rights in good standing at the time such changes and transfers are made.

It is further ordered that the petitioner be authorized to change a total of 0.95 c.f.s. of water of the 1.88 c.f.s. total appropriations from the appropriations described below and to change the rights from irrigation to preferred use for general municipal purposes within the city limits of the Town of the City of Buffalo. This 0.95 c.f.s. of water will only be diverted between the 16th of May through the 15th of September of each year.

a. Part of the Farm Investment Company Appropriation, Territorial Appropriation, P.O. No. 4844, priority Spring 1883.

<table>
<thead>
<tr>
<th>Township</th>
<th>Section</th>
<th>Description</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>51 N</td>
<td>254</td>
<td>NW 1/4</td>
<td>40.00</td>
</tr>
<tr>
<td>51 N</td>
<td>254</td>
<td>SW 1/4</td>
<td>20.00</td>
</tr>
<tr>
<td>Total</td>
<td>60.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The remaining 40 acres in the NW 1/4 of Section 25 are not affected.

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, P.O. No. 4841, priority April 1883.

<table>
<thead>
<tr>
<th>Township</th>
<th>Section</th>
<th>Description</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>51 N</td>
<td>254</td>
<td>NW 1/4</td>
<td>20.00</td>
</tr>
<tr>
<td>51 N</td>
<td>254</td>
<td>SW 1/4</td>
<td>24.42</td>
</tr>
<tr>
<td>51 N</td>
<td>254</td>
<td>SE 1/4</td>
<td>27.00</td>
</tr>
<tr>
<td>Total</td>
<td>71.42</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ORDER RECORD No. 21 --STATE BOARD OF CONTROL

The remaining 73.58 acres in this appropriation are not affected and are described as follows:

Township 51 North, Range 82 West
Section 25: S\NW\SE 35.58 acres
Section 36: S\NW\SE 20.00 acres
Total: S\NW\SE 55.58 acres

Total lands from which rights are removed is 131.42 acres and 1.88 c.f.s. with 0.95 c.f.s. being authorized for municipal use. The 0.93 c.f.s. not authorized for transfer is to remain in Clear Creek to compensate for any loss of return flow.

Petitioner is further authorized to change the point of diversion and means of conveyance for the 0.95 c.f.s. detached from the ditches of record, that is, Snider No. 3 & 4 Ditch, head gate located at a point North 20° 30' West, 2335 feet from the southeast corner of Section 4, Township 50 North, Range 82 West and situated in the S\NE\NE of said Section 4, and Snider No. 4 Ditch, head gate located at a point South 35° 30' West, 1960 feet from the north quarter corner of Section 35, Township 51 North, Range 82 West, and situated in the N\NE\SW of said Section 35, to the Buffalo Water Wagon Pipeline and Ditch, diverting from Clear Creek, Tributary Powder River at a point located South 40° 30' West, 1943 feet from the northeast corner of Section 6, Township 50 North, Range 82 West and situated in the S\NE\NE of said Section 6, and water so diverted at this point enters the municipal water distribution system.

It is further ordered that the petitioner will construct, or cause to be constructed, drainage ditches or dikes which will not allow return flow water or any other waters to be applied to those lands in Section 25, Township 51 North, Range 82 West from which the water rights have been detached by this Order. This construction is to be accomplished to the satisfaction of the Superintendent of Water Division II.

DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING, THIS 13TH DAY OF MAY, 1976.

STATE BOARD OF CONTROL

George L. Christopulos, President

ATTEST:

William Long, Ex-Officio Secretary

ENTERED: October 27, 1976
ORDER RECORD

STATE BOARD OF CONTROL

ORDER RECORD

STATE BOARD OF CONTROL

This matter coming regularly before the Board of Control on the 20th day of November, 1912, upon the petition for assessment of land description under certificate of appropriation herebefore issued by the Board of Control to the Farm Investment Company for a right to direct water from Clear Creek through the Ender No. 4 Ditch, priority April 1668, for the irrigation of 145 acres of land, described as follows: 40 acres SE 1/4 SW 1/4 Section 22; 20 acres SW 1/4 SE 1/4, 20 acres SE 1/4 NE 1/4 Section 26; 20 acres NE 1/4 NE 1/4 Section 26; and 20 acres NE 1/4 SW 1/4 Section 25, Township 51 North, Range 52 West, and of record in this office in Certificate Record No. 3, page 409.

The Board of Control finds, upon examination of the records pertaining to said right, that the land in the SE 1/4 SW 1/4 and SW 1/4 SW 1/4 should be described as being in Section 25, and that an error was made in copying the description into the records; that the proof of appropriation describes the said SW 1/4 SW 1/4 and SW 1/4 SW 1/4 as being in Section 22 instead of Section 26; that the total area is not increased over the area set forth in the original certificate but that the petitioner simply asks for an amendment of the section number to give the correct location of the land irrigated, as shown by the proof submitted and by conditions on the ground.

The Board of Control, being fully advised, and upon the recommendation of the Superintendent of Water Division Number Two,

ORDERS that the amendment herein requested be approved; that the original certificate of appropriation be cancelled on the records of the Board; that the records of the County Clerk's office be in like manner be cancelled and that reference be made from the original order of the Board to this amended order; that a new certificate of appropriation be issued, bearing the same date of priority as the original certificate, but that the area of land described shall not be increased over and above the area set forth in the original certificate.

The Board of Control finds that the name of the appropriator: the priority of said appropriation on the stream from which made; the maximum amount thereof; the use for which the water is appropriated; the acreage and legal subdivisions of the land on which the water appropriated for irrigation is used and to which it is attached, shall be as set forth in the following table, which is hereby made a part of this decree.

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Permit No.</th>
<th>Name of Appraiser</th>
<th>Post Office</th>
<th>Name of Ditch</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 99</td>
<td>4045</td>
<td>Farm Investment Co.</td>
<td>Greeley, Colo.</td>
<td>Ender No. 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>April 1668</td>
</tr>
</tbody>
</table>

It is therefore ordered by the Board of Control that the water is appropriated on the stream above named; the name of the appropriator; the maximum amount of said appropriation; the date thereof; the beneficial use to which the water is made and to which it is to be applied; the acreage and description of the land in said case to which the water appropriated for irrigation is applied and to which it is attached, shall be and the same is hereby deemed to be the same as stated and set forth in the foregoing table under its appropriate heading.

Provided, however, and it is hereby ordered that the appropriation herein determined and established shall be limited in amount to the needs of said lands and not to exceed in amount one cubic foot of water per second for each seventy acres of land irrigated.

It is further ordered that the Board of Control shall certify of appropriation of water, as amended, be issued to said appropriator.

In Witness Whereof, the President of the State Board of Control has hereto set his hand this 7th day of December, A.D. 1912.,

President, State Board of Control.

[Signature]

Secretary.
IN THE MATTER OF THE AMENDED PETITION FOR CHANGE OF POINT OF DIVERSION AND MEANS OF CONVEYANCE OF THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 19276, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE PIPE LINE DITCH, WITH PRIORITY OF DECEMBER 7, 1939; TO BE CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH;

AND AN ALTERNATE POINT OF DIVERSION FOR THE FOLLOWING APPROPRIATIONS:

A. PART OF THE CITY OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH, WITH PRIORITY OF 1879;

B. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER NO. 4 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF APRIL 1883;

C. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER NOS. 1 AND 3 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF SPRING 1883;

D. THE TOWN OF BUFFALO APPROPRIATION (AS SUCCESSOR TO BUFFALO MILL COMPANY), TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO MILL DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF JUNE 1, 1887;

E. THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 23403, WATER STORED IN WILLOW PARK RESERVOIR (PERMIT NO. 6408 RES.), DELIVERED THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH, WITH PRIORITY OF NOVEMBER 21, 1968.
(O.R. 10, P. 174; C.R. 57, P. 343; PROOF NO. 22573
O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840
O.R. 4, P. 609; C.R. 34, P. 99; PROOF NO. 4841
O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844
O.R. 19, P. 100; C.R. 70, P. 69; PROOF NO. 2126
O.R. 19, P. 47; C.R. 70, P. 25; PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, NELS LOFGREN, 46 NORTH MAIN STREET, BUFFALO, COUNTY OF JOHNSON, STATE OF WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 13, 1997, with the following results:

FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations or portions of the appropriations involved as evidenced by Certificates of Appropriation issued by the State Board of Control

2. THAT the appropriations involved are as follows:

   a. The City of Buffalo Appropriation, Permit No. 19276, adjudicated under Proof No. 22573, in the amount of 2.0 c.f.s. for domestic, municipal, industrial and irrigation purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Pipe Line Ditch, with priority of December 7, 1939, and of record in Order Record 10, Page 174; Certificate Record 57, Page 343;

   b. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

   c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;
d. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

e. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

f. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

3. THAT by and through its amended petition, the petitioner requested a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\SE\ of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the SE\SE\ of said Section 6. The lands for which this change is requested are described as follows:

**Township 50 North, Range 82 West**

Section 3: NE\SE\

Section 26: SW\NW\

Section 27: S\E\W\N\E\W\N\E\W\N\E\W\N

Section 34: E\W\E\W\E\W

Section 35: W\E\W\E\E\E

**Township 51 North, Range 82 West**

Section 26: SW\NW\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N

Section 27: S\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N\E\W\N

Section 34: E\W\E\W\E\W

Section 35: W\E\W\E\E\E
4. THAT by and through its amended petition, the petitioner requested an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\(\frac{1}{4}\)NE\(\frac{1}{4}\) of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\(\frac{1}{4}\)NE\(\frac{1}{4}\) of said Section 6:

a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.
5. THAT the reason for the requested change of point of diversion and means of conveyance is that hydraulic conditions at the existing diversion make measurement and administration of this appropriation difficult. The existing diversion often becomes blocked with sediment and trash and is becoming increasingly difficult and expensive to maintain. The requested change will allow a more efficient and economical use of this appropriation.

6. THAT the reason for the requested alternate point of diversion and means of conveyance is that the existing pipeline from the City of Buffalo's diversion dam to the new water treatment and hydropower plant does not have the capacity to carry all of the appropriations involved in this change, particularly when the hydropower turbine is in use.

7. THAT there are three (3) intervening points of diversion between the point of diversion of the Buffalo Water Wagon Pipe Line and Ditch and the record point of diversion of the Pipe Line Ditch. These three (3) intervening points of diversion are for the following facilities:

   Fort McKinney Ditch
   Veteran Supply Ditch
   Shreve Ditch

8. THAT consents from all of the owners of the three (3) intervening facilities was not obtained.

9. THAT there are no intervening tributaries or other sources of supply which might affect the rights of other appropriators.

10. THAT this amended petition was referred to a public hearing in accordance with Section 41-3-114, W.S. 1977, at Buffalo, Wyoming, on March 26, 1997, conducted by the Superintendent of Water Division No. II. Due and legal notice of the time and place of the hearing was given in all respects as required by law. No protest to this amended petition was registered at the hearing or subsequent thereto.

11. THAT properly prepared maps accompanied the amended petition.

12. THAT the granting of this amended petition will not cause injury to other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said amended petition.
The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and the amended petition should be granted.

**ORDER**

**IT IS FURTHER ORDERED THAT** this amended petition be and the same is GRANTED without loss of priority and subject to the condition that the changes shall not adversely affect the rights of other appropriators in good standing at the time the changes are made.

**IT IS FURTHER ORDERED THAT** the petitioner be allowed a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE\(^3\)SE\(^2\) of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\(^3\)NE\(^2\) of said Section 6. The lands for which this change is allowed are described as follows:

- **Township 50 North, Range 82 West**
  - Section 3: NE\(^3\)NE\(^2\)
  - Section 51 North, Range 82 West
  - Section 26: SW\(^4\)NW\(^3\)
  - SW\(^4\)SW\(^3\)
  - Section 27: SE\(^2\)NE\(^2\)
  - SE\(^2\)
  - Section 34: E\(^2\)
  - Section 35: W\(^2\)

**IT IS FURTHER ORDERED THAT** the petitioner be allowed an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\(^2\)NW\(^3\) of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\(^3\)NE\(^2\) of said Section 6:
a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

THAT the petitioner must notify the water commissioner 24 hours in advance of its intention to use the alternate point of diversion.
DONE AT TORRINGTON, COUNTY OF GOSHEN, STATE OF WYOMING, THIS 13TH DAY OF MAY 1997.

STATE BOARD OF CONTROL

ATTEST:

GORDON W. FASSETT, PRESIDENT

ALLAN CUNNINGHAM, EX-OFFICIO SECRETARY

ENTERED: APRIL 9, 1999
Proof 4844
Snider No. 3 and 1 Ditch
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<tr>
<th>Date</th>
<th>Location</th>
<th>Action</th>
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<td>4/9/40</td>
<td>Clear Creek</td>
<td>Issued Certificate</td>
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<tr>
<td>5/9/40</td>
<td>Sioux County</td>
<td>Amended Certificate</td>
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<td>5/24/40</td>
<td>Dakota County</td>
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<td>Sioux County</td>
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<td>10/24/40</td>
<td>Clear Creek</td>
<td>Issued Certificate</td>
</tr>
</tbody>
</table>

**Notes:**
- The detached items from the records were due to clerical errors and were not authorized.
- The detachment was not for a non-resident.
- The detachment was not for a non-resident.
- The detachment was not for a non-resident.
- The detachment was not for a non-resident.
- The detachment was not for a non-resident.
- The detachment was not for a non-resident.
diverting from the same source at a point in the Northeast Corner of Lot 2, Section 33, Township 81 North, Range 82 West;

THAT said change be granted without loss of priority, subject to the condition that the rights of other appropriators shall not be injured.

DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING, THIS 20TH DAY OF NOVEMBER, 1957.

STATE BOARD OF CONTROL

ATTEST:

GEORGE L. CHRISTIANSEN, ex-officio Secretary

ENTERED: November 14, 1961

For determination of 0.36 acre-foot of 60 recharges the agency and from 102 acre-feet required of 77 acre-feet to another agency, the deficient will be 21 acre-feet. 60 acre-feet. Changes part of municipal purposes to 21 acre-feet for stream flow loss.
IN THE MATTER OF THE PETITION OF IRVING J. HARBEE, et al.,
FOR CHANGE IN POINT OF DIVERSION AND MEANS OF CONVEYANCE OF PART OF AN APPROPRIATION OF WATER FROM
CLEAR CREEK, TRIBUTARY OF POWDER RIVER, WITH
PRIORITY OF SPRING, 1863, FROM THE SNIDER NO. THREE, AND ONE DITCH, TO THE SNIDER NO. FOUR DITCH, (O. R.)
3, P. 181; C. R. 5, P. 408; Fr. 4844)

FINDINGS AND ORDERS:

THIS MATTER coming regularly before the State Board of Control this 20th day of November, 1957, the Board FINDS:

That the petitioner, Irving J. Harbee, seeks forthwith that he is the sole owner of that part of an appropriation of water from Clear Creek, tributary of Powder River, through the Snider No. Three and One Ditch, under Territorial priority of Spring, 1863 (C. R. 5, P. 408; Fr. 4844) for the irrigation of 18.6 acres of land in the NE[SW]4, Section 26, Township 11 North, Range 82 West;

That the petitioner requests permission to change the point of diversion and means of conveyance of said appropriation above described from the Snider No. Three and One Ditch, diverting water from Clear Creek at a point in the NE[SW]4 of Section 4, Township 50 North, Range 82 West, to the Snider No. Four Ditch diverting water from the same source of supply at a point in Northeast Corner of Lot 8, Section 35, Township 11 North, Range 82 West;

That the reason for the proposed change is that the 18.6 acres in the NE[SW]4 of Section 26, Township 11 North, Range 82 West, can, in the interest of water economy, be better irrigated, along with other lands owned by the petitioner under the Snider No. Four Ditch, which is a shorter ditch, with less loss of water from seepage and evaporation;

That the consent of the Northern Wyoming Land Company, owner of an appropriation of water carried through the Snider No. Three and One Ditch, accompanies the petition;

That the consent of the owners of the Clear Creek Land and Ditch Company Ditch, which intervenes between the present and proposed new points of diversion, accompanies the petition;

That the consent of the co-owners with the petitioner of the Snider No. Four Ditch, accompanies the petition;

That a certificate of the County Clerk of Johnson County, showing the petitioner to be the owner of the NE[SW]4, Section 26, Township 11 North, Range 82 West, accompanies the petition;

That a map in duplicate, prepared by a registered Land Surveyor, showing the situation, accompanies the petition.

The Board, now being advised by the records of the office of the State Board of Control and the showings presented in the matter, THEREFORE ORDERS:

That the petition be GRANTED;

That the petitioner, Irving J. Harbee, be permitted to change the point of diversion and means of conveyance of that part of an appropriation of water from Clear Creek, tributary of Powder River, under Territorial priority of Spring, 1863, originally adjudicated to the Farm Investment Company, (O. R. 5, P. 181; C. R. 5, P. 408; Fr. 4844) for the irrigation of 18.6 acres in the NE[SW]4, Section 26, Township 11 North, Range 82 West, from the Snider No. Three and One Ditch with point of diversion located in the NE[SW]4 of Section 4, Township 50 North, Range 82 West, to the Snider No. Four Ditch.
CERTIFICATE OF SURVEY:

STATE OF WYOMING,
COUNTY OF JEROME,

BEFORE ME, personally known to me, the subscriber, the undersigned, a duly qualified Surveyor, duly registered in the Territory of Wyoming, as a Surveyor, did make, the survey of the plot of land designated as "Record Point of Diversion for the Buffalo Water Mason Pipe Line and Ditch for the Following Appropriations," as follows:

1. The City of Buffalo Appropriation, Territorial Appropriation, prior to 1860.
   - Prior to 1860.
2. The Rand Development Company Appropriation, Territorial Appropriation, prior to 1860.
   - Prior to 1860.
3. The Rand Development Company Appropriation, Territorial Appropriation, prior to 1860.
   - Prior to 1860.
4. The City of Buffalo Appropriation, Territorial Appropriation, prior to 1860.
   - Prior to 1860.
5. The City of Buffalo Appropriation, Territorial Appropriation, prior to 1860.
   - Prior to 1860.

EXACTLY SHOWN BY THE ATTACHED SURVEY.

J. B. Dixon
Surveyor

May 26, 1881

MAP TO ACCOMPANY PETITION TO THE STATE BOARD OF CONTROL FOR AN ADDITIONAL MEANS OF CONVEYANCE FOR THE FOLLOWING APPROPRIATIONS:

- MINING FROM CLEAR CREEK THROUGH THE BUFFALO WATER MASON PIPE LINE AND DITCH.

- THE CITY OF BUFFALO APPROPRIATION:
  - Territorial Appropriation, prior to 1860.
  - Prior to 1860.
- THE RAND DEVELOPMENT COMPANY APPROPRIATION:
  - Territorial Appropriation, prior to 1860.
  - Prior to 1860.
- THE CITY OF BUFFALO APPROPRIATION:
  - Territorial Appropriation, prior to 1860.
  - Prior to 1860.
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  - Territorial Appropriation, prior to 1860.
  - Prior to 1860.
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  - Territorial Appropriation, prior to 1860.
  - Prior to 1860.
- THE CITY OF BUFFALO APPROPRIATION:
  - Territorial Appropriation, prior to 1860.
  - Prior to 1860.

J. B. Dixon
Surveyor

May 26, 1881
LEGEND

Lands irrigated under Snider Nos. 1 & 3 Ditch
Lands irrigated under Snider No. 4 Ditch
Land now under Snider Nos. 1 & 3 Ditch changed to Snider No. 4 Ditch

SNIDER No. 4 DITCH
Terr. Permit, April 1883, from Clear Creek Trib. Powder River for 145 acres with 2.07 C.F.S. for irrigation

SNIDER Nos. 1 & 3 DITCH

NOTE
Location of streams and ditches taken from aerial surveys, lands irrigated in each legal subdivision from Office of State Engineer, and detail of land to be changed made from actual survey

State of Wyoming
County of Johnson

City of Evanston

Petition granted November 20, 1957

George S. Christensen
Ex-Armed Secretary State Board of Control
IN THE MATTER OF THE AMENDED PETITION FOR CHANGE OF POINT OF DIVERSION AND MEANS OF CONVEYANCE OF THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 19276, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE PIPE LINE DITCH, WITH PRIORITY OF DECEMBER 7, 1939; TO BE CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH;

AND AN ALTERNATE POINT OF DIVERSION FOR THE FOLLOWING APPROPRIATIONS:

A. PART OF THE CITY OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH, WITH PRIORITY OF 1879;

B. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER NO. 4 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF APRIL 1883;

C. PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE SNIDER NOS. 1 AND 3 DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF SPRING 1883;

D. THE TOWN OF BUFFALO APPROPRIATION (AS SUCCESSOR TO BUFFALO MILL COMPANY), TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, TRIBUTARY POWDER RIVER, TRIBUTARY YELLOWSTONE RIVER, THROUGH THE BUFFALO MILL DITCH (AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH), WITH PRIORITY OF JUNE 1, 1887;

E. THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 23403, WATER STORED IN WILLOW PARK RESERVOIR (PERMIT NO. 6408 RES.), DELIVERED THROUGH THE BUFFALO WATER WAGON PIPE LINE AND DITCH, WITH PRIORITY OF NOVEMBER 21, 1968.
This matter was considered by the State Board of Control at its regular meeting on May 13, 1997, with the following results:

FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations or portions of the appropriations involved as evidenced by Certificates of Appropriation issued by the State Board of Control.

2. THAT the appropriations involved are as follows:

   a. The City of Buffalo Appropriation, Permit No. 19276, adjudicated under Proof No. 22573, in the amount of 2.0 c.f.s. for domestic, municipal, industrial and irrigation purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Pipe Line Ditch, with priority of December 7, 1939, and of record in Order Record 10, Page 174; Certificate Record 57, Page 343;

   b. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

   c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;
d. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

e. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

f. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

3. THAT by and through its amended petition, the petitioner requested a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2,712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE<sub>4</sub>SE<sub>4</sub> of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1,943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE<sub>3</sub>NE<sub>3</sub> of said Section 6. The lands for which this change is requested are described as follows:

- **Township 50 North, Range 82 West**
  - Section 3: NE<sub>4</sub>SE<sub>4</sub>
  - Section 5: NE<sub>2</sub>SE<sub>2</sub>
  - Section 6: SW<sub>2</sub>SE<sub>2</sub>
  - Section 7: NW<sub>2</sub>SW<sub>2</sub>

- **Township 51 North, Range 82 West**
  - Section 26: SW<sub>4</sub>NE<sub>4</sub>
  - Section 27: NE<sub>4</sub>SE<sub>4</sub>
  - Section 34: E<sub>4</sub>
  - Section 35: W<sub>4</sub>
4. THAT by and through its amended petition, the petitioner requested an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE\NW\ of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE\NE\ of said Section 6:

a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 9, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.
5. THAT the reason for the requested change of point of diversion and means of conveyance is that hydraulic conditions at the existing diversion make measurement and administration of this appropriation difficult. The existing diversion often becomes blocked with sediment and trash and is becoming increasingly difficult and expensive to maintain. The requested change will allow a more efficient and economical use of this appropriation.

6. THAT the reason for the requested alternate point of diversion and means of conveyance is that the existing pipeline from the City of Buffalo's diversion dam to the new water treatment and hydropower plant does not have the capacity to carry all of the appropriations involved in this change, particularly when the hydropower turbine is in use.

7. THAT there are three (3) intervening points of diversion between the point of diversion of the Buffalo Water Wagon Pipe Line and Ditch and the record point of diversion of the Pipe Line Ditch. These three (3) intervening points of diversion are for the following facilities:
   Fort McKinney Ditch
   Veteran Supply Ditch
   Shreve Ditch

8. THAT consents from all of the owners of the three (3) intervening facilities was not obtained.

9. THAT there are no intervening tributaries or other sources of supply which might affect the rights of other appropriators.

10. THAT this amended petition was referred to a public hearing in accordance with Section 41-3-114, W.S. 1977, at Buffalo, Wyoming, on March 26, 1997, conducted by the Superintendent of Water Division No. II. Due and legal notice of the time and place of the hearing was given in all respects as required by law. No protest to this amended petition was registered at the hearing or subsequent thereto.

11. THAT properly prepared maps accompanied the amended petition.

12. THAT the granting of this amended petition will not cause injury to other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said amended petition.
The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change of point of diversion and means of conveyance and change of alternate point of diversion and means of conveyance and the amended petition should be granted.

ORDER

IT IS FURTHER ORDERED THAT this amended petition be and the same is GRANTED without loss of priority and subject to the condition that the changes shall not adversely affect the rights of other appropriators in good standing at the time the changes are made.

IT IS FURTHER ORDERED THAT the petitioner be allowed a change of point of diversion and means of conveyance of the City of Buffalo Appropriation, Permit No. 19276, Proof No. 22573, the Pipe Line Ditch, from its record location described as South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West, and situated in the NE1/4SE1/4 of said Section 5; to the alternate point of diversion for the Buffalo Water Wagon Pipe Line and Ditch, diverting from the same source of supply, under Territorial Appropriations and Permit No. 23403, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE1/4NE1/4 of said Section 6. The lands for which this change is allowed are described as follows:

- **Township 50 North, Range 82 West**
  - Section 3: N1/4NE1/4
- **Township 51 North, Range 82 West**
  - Section 26: SW1/4NW1/4
  - W1/4SW1/4
  - Section 27: S1/4NE1/4
  - SE1/4
  - Section 34: E1/4
  - Section 35: W1/4

IT IS FURTHER ORDERED THAT the petitioner be allowed an alternate point of diversion and means of conveyance for the following appropriations from its record point of diversion described as South 63° 09' 25" West, 3108.5 feet distant from Northeast Corner of Section 10, Township 50 North, Range 83 West, and situated in the SE1/4NW1/4 of said Section 10; to an alternate point of diversion, diverting from the same source of supply, at a point described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situated in the SE1/4NE1/4 of said Section 6:
a. Part of the City of Buffalo Appropriation, Territorial Appropriation, adjudicated under Proof No. 4840, in the amount 3.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Water Wagon Pipe Line and Ditch, with priority of 1879, and of record in Order Record 3, Page 150; Certificate Record 3, Page 410;

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4841, in the amount of 0.43 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider No. 4 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of April 1883, and of record in Order Record 4, Page 609; Certificate Record 34, Page 99;

c. Part of the Farm Investment Company Appropriation, Territorial Appropriation, adjudicated under Proof No. 4844, in the amount of 0.52 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Snider Nos. 1 and 3 Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of Spring 1883, and of record in Order Record 3, Page 150; Certificate Record 3, Page 408;

d. The Town of Buffalo Appropriation (as successor to Buffalo Mill Company), Territorial Appropriation, adjudicated under Proof No. 2126, in the amount of 4.0 c.f.s., for municipal purposes, diverting from Clear Creek, tributary Powder River, tributary Yellowstone River, through the Buffalo Mill Ditch (as previously changed to the Buffalo Water Wagon Pipe Line and Ditch), with priority of June 1, 1887, and of record in Order Record 19, Page 100; Certificate Record 70, Page 69;

e. The City of Buffalo Appropriation, Permit No. 23403, adjudicated under Proof No. 29786, in the amount of 2.0 c.f.s., for municipal purposes, storing water in Willow Park Reservoir (Permit No. 6408 Res.), delivered through the Buffalo Water Wagon Pipe Line and Ditch, with priority of November 21, 1968, and of record in Order Record 19, Page 47; Certificate Record 70, Page 25.

THAT the petitioner must notify the water commissioner 24 hours in advance of its intention to use the alternate point of diversion.
DONE AT TORRINGTON, COUNTY OF GOSHEN, STATE OF WYOMING, THIS 13TH DAY OF MAY 1997.

STATE BOARD OF CONTROL

ATTEST:

GORDON W. FASSETT, PRESIDENT

ALLAN CUNNINGHAM, EX-OFFICIO SECRETARY

ENTERED: APRIL 9, 1999
PETITION TO ADD AN ADDITIONAL MEANS OF CONVEYANCE TO THE FOLLOWING APPROPRIATIONS:


D. THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER, WHICH IS A TRIBUTARY OF THE YELLOWSTONE RIVER THROUGH THE BUFFALO MILL DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF JUNE 1, 1887.


(O.R. 3, P. 150; C.R. 3, P. 410; PROOF NO. 4840)

O.R. 4, F. 609; C.R. 34, P. 99; PROOF NO. 4841

O.R. 3, P. 150; C.R. 3, P. 408; PROOF NO. 4844

O.R. 19, F. 100; C.R. 70, P. 69; PROOF NO. 2126

O.R. 19, P. 47; C.R. 70, P. 25; PROOF NO. 29786)

PETITIONER: CITY OF BUFFALO, A MUNICIPAL CORPORATION, ACTING THROUGH ITS MAYOR, RICHARD W. DOUGLASS, 46 NORTH MAIN, BUFFALO, WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on May 18, 1987 with the following results:
FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriation involved as evidenced by the Certificates of Appropriation issued by the Wyoming State Board of Control and the fact that the water rights in question and for which a change in point of diversion and additional means of conveyance is requested are within the corporate limits of the Town of Buffalo.

2. THAT the appropriations involved are as follows:
   a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879 and of record in Order Record 3, page 150; Certificate Record 3, page 410.
   b. The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883 and of record in Order Record 4, page 609; Certificate Record 34, page 99.
   c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883 and of record in Order Record 3, page 150; Certificate Record 3, page 408.
   d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. with a priority of June 1, 1887 and of record in Order Record 19, page 100; Certificate Record 70, page 69.
   e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s., water stored in Willow Park Reservoir, Permit No. 6408 Res., in the total amount of 100 acre-feet with a priority of November 21, 1968 and of record in Order Record 19, page 47; Certificate Record 70, page 25.

3. THAT currently the appropriations involved are diverted from Clear Creek at a point South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situate in the SE\(^2\) NW\(^2\) of said Section 10. From this point water is conveyed by the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo's holding ponds and treatment facilities and then conveyed by the Buffalo Water Transmission Lines to the city's distribution system. A portion of the water, as treated, irrigates lands that are now baseball fields and a golf course for which the water does not need to be treated. The use of water on these parcels of land also causes low pressures within the city's distribution system. The City now proposes to allow water from the treatment ponds to overflow into Clear Creek and be conveyed down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diversts from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE\(^2\) SE\(^2\) of said Section 5. At this point the untreated water will be conveyed through the pipe line to irrigate the lands now covered under the baseball fields and the golf course, thus avoiding use of treated water on these lands.
4. THAT the lands that would be watered and/or irrigated by the water changed to this pipe line are described as follows:

Township 50 North, Range 82 West
Section 3: NE\(\text{NE}\text{NE}\text{NE})

Township 51 North, Range 82 West Dep. Resurvey
Section 27: SE\(\text{SE}\text{SE}\text{SE})
Lot 12
Section 34: NE\(\text{NE}\text{NE}\text{NE})
S\(\text{S}\text{S}\text{S})
Lots 3, 7, and 8
Section 35: Lot 6

5. THAT there are two intervening points of diversion between the point of discharge into the North Branch of Clear Creek and the point of diversion of the Pipe Line Ditch, Permit No. 19276. These are: Ft. McKinney Ditch and the Veteran Supply Ditch.

6. THAT consent from the owners of these ditches accompanied the petition.

7. THAT a properly prepared map showing the point of diversion as now used by the City and the proposed point of diversion of the raw water pipe line accompanied the petition.

8. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

1. The State Board of Control has jurisdiction both to consider the petitioner's request for an additional means of conveyance and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

2. The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to means of conveyance and the petition should be granted.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.
IT IS FURTHER ORDERED THAT the petitioner be allowed an additional means of conveyance for part of the following appropriations:

a. The City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes with a priority of 1879.

b. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes with a priority of April, 1883.

c. The Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes with a priority of Spring, 1883.

d. The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786 in the amount of 2.0 c.f.s. water stored in Willow Park Reservoir, Permit No. 6438 Res. with a priority of November 21, 1862.

That when needed, the city be allowed to divert these appropriations from Clear Creek at a point South 63° 09' 25" West, 3108.5 distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West and situate in the SE\(\frac{1}{4}\)NW\(\frac{1}{4}\) of said Section 10, and convey that water through the Buffalo Water Wagon Pipe Line and Ditch to the City of Buffalo's holding ponds and treatment facilities and release water from the holding pond into the North Branch of Clear Creek and convey that water down Clear Creek to the point of diversion of the Pipe Line Ditch, Permit No. 19276, which diverts from the North Branch of Clear Creek at a point South 4° 25' 16" West, 2712.6 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE\(\frac{1}{4}\)SW\(\frac{1}{4}\) of said Section 5. The water as diverted through this pipe line will be untreated water for the irrigation of lands known as the City's parks and golf course, more particularly described as follows:

Township 50 North, Range 82 West
Section 3: NE\(\frac{1}{4}\)SW\(\frac{1}{4}\)
Lot 12

Township 51 North, Range 82 West Dep. Resurvey
Section 27: SE\(\frac{1}{4}\)SW\(\frac{1}{4}\)
Lot 12

Section 34: NE\(\frac{1}{4}\)SW\(\frac{1}{4}\)
Lots 3, 7, and 8

Section 35: Lot 6
DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 18TH DAY OF MAY, 1987.

STATE BOARD OF CONTROL

GORDON W. FASSETT, PRESIDENT

ATTEST:

FRANCIS A. CARR, ADJUDICATION OFFICER

ENTERED: June 15, 1988

1. THAT the petitioner is the owner of the 4.21 acres for which a change of point of diversion and means of conveyance is sought.

2. THAT the appropriation involved is the Johnson County, Wyoming appropriation, Territorial Appropriation, adjudicated under Proof No. 4843 in the amount of 0.84 c.f.s. for the irrigation of 59.0 acres, diverting from Clear Creek, a tributary of the Powder River, which is a tributary of the Yellowstone River through the Snider Nos. 1 & 3 Ditch with a priority of Spring 1883 and of record in Order Record 14, page 186; Certificate Record 65, page 146 describing the lands irrigated as follows:

   Township 51 North, Range 82 West Dep. Resurvey
   Section 26: SW1/4NE1/4 4.00 acres
     Lot 2(SW1/4NE1/4) 15.00
     SE1/4SW1/4 35.79
   Section 34: Lot 5(NW1/4SE1/4) 4.21
   Total 59.00 acres (0.84 c.f.s.)

3. THAT the petitioner requested a change of point of diversion and means of conveyance of a portion (4.21 acres) of the Johnson County, Wyoming appropriation, the Snider Nos. 1 & 3 Ditch, which diverts from Clear Creek at a point North 20° 50' West, 2535.0 feet distant from the Southeast Corner of Section 4, Township 50 North, Range 82 West and situate in the NE1/4SE1/4 of said Section 4 to the Pipe Line Ditch, Permit No. 19276, which diverts from the same source at a point South 03° 14' West, 2797.0 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE1/4SE1/4 of said Section 5. The lands for which this change is requested are described as follows:

(continued on page 253)
STA7E IIOARD OF CONTROL ORDER RECORD NO. 32, PAGE 253

Township 51 North, Range 82 West Dep. Resurvey
Section 34: Lot 5(NW\N) 4.21 acres
Total 4.21 acres (0.06 c.f.s.)

The remainder of the Johnson County, Wyoming appropriation is unaffected by this petition.

4. THAT the reason for the requested change of point of diversion and means of conveyance is that the lands involved are now a city park. The proposed new point of diversion will enable Johnson County to utilize the city's raw water pipeline for conveyance and then irrigate by means of a sprinkler system which will provide for a more economical use of water.

5. THAT there are no intervening points of diversion (headgates) between the point of diversion of the Snider Nos. 1 & 3 Ditch and the point of diversion of the Pipe Line Ditch, Permit No. 19276.

6. THAT there are no intervening tributaries or other sources of supply which would affect the rights of other appropriators.

7. THAT consent from the remaining owners of the Snider Nos. 1 & 3 Ditch accompanied the petition.

8. THAT consent from the City of Buffalo, owner of Permit No. 19276, the Pipe Line Ditch, accompanied the petition.

9. THAT a properly prepared map accompanied the petition.

10. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change of point of diversion and means of conveyance and to prepare and promulgate the order hereinafter set forth disposing of said petition.

The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change of point of diversion and means of conveyance and the petition should be granted.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.
IT IS FURTHER ORDERED THAT the petitioner be allowed to change the point of diversion and means of conveyance of a portion (4.21 acres) of the Johnson County, Wyoming appropriation, the Snider Nos. 1 & 3 Ditch which diverts from Clear Creek at a point North 20° 50' West, 2535.0 feet distant from the Southeast Corner of Section 4, Township 50 North, Range 82 West and situate in the NE\(\frac{1}{4}\) of said Section 4 to the Pipe Line Ditch, Permit No. 19276, which diverts from the same source at a point South 03° 14' West, 2797.0 feet distant from the Northeast Corner of Section 5, Township 50 North, Range 82 West and situate in the NE\(\frac{1}{4}\) of said Section 5. The lands for which this change is allowed are described as follows:

\[
\begin{array}{l}
\text{Township 51 North, Range 82 West Dep. Resurvey} \\
\text{Section 34: Lot 5(NW\(\frac{1}{4}\)NE\(\frac{1}{4}\)) 4.21 acres} \\
\text{Total 4.21 acres (0.06 c.f.s.)}
\end{array}
\]

The remainder of the Johnson County, Wyoming appropriation, Proof No. 4843, is unaffected by the granting of this petition and is described as follows:

\[
\begin{array}{l}
\text{Township 51 North, Range 82 West Dep. Resurvey} \\
\text{Section 26: SW\(\frac{1}{4}\)NE\(\frac{1}{2}\)} \\
\text{Lot 2(SW\(\frac{1}{4}\)NW\(\frac{1}{2}\)) 15.00} \\
\text{SE\(\frac{1}{4}\)NW\(\frac{1}{2}\)} 35.79 \\
\text{Total 54.79 acres (0.78 c.f.s.)}
\end{array}
\]


STATE BOARD OF CONTROL

GORDON W. FASSBETT, PRESIDENT

ATTEST:

ENTERED: April 20, 1988
IN THE MATTER OF THE PETITION FOR CHANGE IN POINT OF DIVERSION OF THE
FOLLOWING APPROPRIATIONS:

PART OF THE CITY OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION,
DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER THROUGH THE
BUFFALO WATER WAGON PIPE LINE AND DITCH WITH A PRIORITY OF 1879.

PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION,
DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER THROUGH
THE SNIDER NO. 4 DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON
PIPE LINE AND DITCH WITH A PRIORITY OF APRIL 1883.

PART OF THE FARM INVESTMENT COMPANY APPROPRIATION, TERRITORIAL APPROPRIATION,
DIVERTING FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER THROUGH
THE SNIDER NOS. 1 AND 3 DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON
PIPE LINE AND DITCH WITH A PRIORITY OF SPRING 1883.

THE TOWN OF BUFFALO APPROPRIATION, TERRITORIAL APPROPRIATION, DIVERTING
FROM CLEAR CREEK, A TRIBUTARY OF THE POWDER RIVER THROUGH THE BUFFALO MILL
DITCH AS PREVIOUSLY CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH
WITH A PRIORITY OF JUNE 1, 1897.

THE CITY OF BUFFALO APPROPRIATION, PERMIT NO. 23603, WATER STORED IN
WILLOW PARK RESERVOIR, PERMIT NO. 6409 RES., AND DELIVERED THROUGH THE
BUFFALO MILL DITCH AS CHANGED TO THE BUFFALO WATER WAGON PIPE LINE AND DITCH
WITH A PRIORITY OF NOVEMBER 21, 1968.

PETITIONER: CITY OF BUFFALO, ACTING THROUGH ITS MAYOR, MR. EMIL O. HECHT OF BUFFALO, COUNTY OF JOHNSON, STATE OF WYOMING 82834.

This matter was considered by the State Board of Control at its regular meeting on November 28, 1984, with the following results:

FINDINGS OF FACT

1. THAT the petitioner is the owner of the appropriations for which a change in point of diversion is sought.
2. THAT the appropriations for which a change in point of diversion is sought are described as follows:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879, and of record in Order Record 3, page 150; Certificate Record 3, page 410. (The remainder of the appropriation was previously changed to the Carville & Lobban Ditch and is unaffected by this petition.)

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 4, page 609; Certificate Record 34, page 99.

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of Spring 1883, (water to be used only during the period of May 16 through September 15 of each year) and of record in Order Record 3, page 150; Certificate Record 3, page 408.

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887, and of record in Order Record 19, page 100; Certificate Record 70, page 69.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968, and of record in Order Record 19, page 47; Certificate Record 70, page 25.

All of the above listed appropriations are used for municipal purposes within the city limits of the Town of Buffalo.

3. THAT the petitioner requested a change in point of diversion of the Buffalo Water Wagon Pipe Line and Ditch from its record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6, Township 50 North, Range 82 West, and situate in the SE²NE² of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the SE¹NW¹ of said Section 10.

4. THAT the reason for the requested change is that the present point of diversion is located at a site which freezes up during the winter months and prevents full diversion to meet the City's water demands. Further, recreational activity along Clear Creek above the present point of diversion threatens the purity of the water. The proposed new point of diversion is above this activity and would enable the pipeline to convey the water more efficiently and prevent possible contamination of the water.
5. THAT there are numerous points of diversion between the existing point of diversion of the Buffalo Water Wagon Pipe Line and the proposed point of diversion of the Buffalo Water Wagon Pipe Line.

6. THAT consent was obtained from part but not all of the owners of rights of the intervening points of diversion; therefore, this matter was referred to the Superintendent of Water Division No. II for a public hearing.

7. THAT in accordance with Section 41-3-114, W.S. 1977, a public hearing was held on November 1, 1984, at the Johnson County Courthouse, Buffalo, Wyoming. This hearing was held before the Superintendent of Water Division No. II.

8. THAT due and legal notice of the time and place of the hearing was served upon all interested parties by certified mail, return receipt requested.

9. THAT no valid protest to this petition was registered at this hearing or subsequent thereto.

10. THAT there are no intervening tributaries or other sources of supply which would affect the rights of other appropriators.

11. THAT a properly prepared map accompanied the petition.

12. THAT the granting of this petition will not injure any other appropriators.

CONCLUSIONS OF LAW

The State Board of Control has jurisdiction both to consider the petitioner's request for change in point of diversion and to prepare and promulgate the Order hereinafter set forth disposing of said petition.

The Findings of Fact contain the elements necessary to comply with Section 41-3-114, W.S. 1977, pertaining to change in point of diversion and the petition should be granted.

Due and proper notice of the time and place of the hearing was given in all respects.

ORDER

IT IS HEREBY ORDERED THAT this petition be and the same is GRANTED without loss of priority and subject to the condition that the change shall not adversely affect the rights of other appropriators in good standing at the time the change is made.

IT IS FURTHER ORDERED THAT the petitioner be allowed to change the point of diversion of the following appropriations from their record point of diversion on Clear Creek and described as South 40° 50' West, 1943.0 feet distant from the Northeast Corner of Section 6,
Township 50 North, Range 82 West, and situate in the SE\NE\ of Section 6, to a new point diverting from the same source and described as South 63° 09' 25" West, 3108.5 feet distant from the Northeast Corner of Section 10, Township 50 North, Range 83 West, and situate in the SE\NE\ of said Section 10:

a. Part of the City of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 4840 in the amount of 3.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of 1879.

b. That portion of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4841 in the amount of 0.43 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider No. 4 Ditch, as changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of April 1883, (water to be used only during the period of May 16 through September 15 of each year).

c. Part of the Farm Investment Company appropriation, Territorial Appropriation, adjudicated under Proof No. 4844 in the amount of 0.52 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Snider Nos. 1 and 3 Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of Spring 1883, (water to be used only during the period of May 16 through September 15 of each year).

d. The Town of Buffalo appropriation, Territorial Appropriation, adjudicated under Proof No. 2126 in the amount of 4.0 c.f.s. for municipal purposes and diverting from Clear Creek, a tributary of the Powder River through the Buffalo Mill Ditch, as previously changed to the Buffalo Water Wagon Pipe Line and Ditch, with a priority of June 1, 1887.

e. The City of Buffalo appropriation, Permit No. 23403, adjudicated under Proof No. 29786, Secondary Supply of 100 acre-feet of water stored in Willow Park Reservoir, Permit No. 6408 Res., for municipal purposes, water is released down South Fork of South Piney Creek at a rate of 2.00 c.f.s. in lieu of an equal amount of water diverted from Clear Creek and delivered through the Buffalo Water Wagon Pipe Line and Ditch, with a priority of November 21, 1968.

A summary of the rights changed is as follows:

The City of Buffalo appropriation, Territorial Appropriation, Proof No. 4840, with a priority of 1879 .... 3.00 c.f.s.

The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4841, with a priority of April 1883 .... 0.43 c.f.s.

The Farm Investment Company appropriation, Territorial Appropriation, Proof No. 4844, with a priority of Spring 1883 .... 0.52 c.f.s.
The Town of Buffalo appropriation, Territorial Appropriation, Proof No. 2126, with a priority of June 1887 . . . . 4.00 c.f.s.

The City of Buffalo appropriation, Proof No. 29786, Permit No. 23403, with a priority of November 1968, 100 acre-feet at a rate of 2.0 c.f.s. . . . . 2.00 c.f.s.

Total 9.95 c.f.s.

IT IS FURTHER ORDERED THAT a proper metering device which is readily accessible to state personnel be installed just below the diversion of the pipeline.

DONE AT CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING THIS 28TH DAY OF NOVEMBER, 1984.

STATE BOARD OF CONTROL

GEORGE L. CHRISTOPULOS, PRESIDENT

ATTEST:

GORDON W. FASSETT, EX-OFFICIO SECRETARY

ENTERED: October 29, 1985
This matter was considered by the State Board of Control at its regular meeting on 13 May 1976, with the following results:

FINDINGS OF FACT

1. The Board of Control has the jurisdiction both to consider the petitioner's request for change of use and change in point of diversion and means of conveyance; and to prepare and promulgate the Order hereinafter set forth disposing of said petitions.

2. The petitioner has secured Water Rights Deeds covering water rights on the portions of the appropriations described below and authorizing detachment of water rights from said lands. These Deeds are part of the petition record. Just compensation has been paid to the proper owner for such Deeds.

3. The appropriations involved both divert from Clear Creek, Tributary Powder River and are identified as follows:

a. The Farm Investment Company Appropriation, Territorial Appropriation, through the Snider No. 3 & 1 Ditch, priority Spring 1883; and of record in Order Record 3, Page 151; Certificate Record 3, Page 406, Proof No. 4844; amended by Order Record 14, Page 448, for irrigation of the following lands:

<table>
<thead>
<tr>
<th>Township 51 North, Range 82 West</th>
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<tbody>
<tr>
<td>Section 25</td>
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<tr>
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</table>

* Note: Order Record 14, Page 448 authorizes change in point of diversion and means of conveyance for irrigation of 1.0 acres in the NE, NW, SE, SW of Section 25, from the Snider No. 3 & 1 Ditch to the Snider No. 4 Ditch.

b. The Farm Investment Company Appropriation, Territorial Appropriation, through the Snider No. 4 Ditch, priority April 1883; and of record in Order Record 3, Page 151; Certificate Record 3, Page 409; Proof No. 4861; amended by Order Record 4, Page 409; Certificate Record 34, Page 99, for irrigation of the following lands:

<table>
<thead>
<tr>
<th>Township 51 North, Range 82 West</th>
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<tbody>
<tr>
<td>Section 25</td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

| Section 36 | NE, NW, SE, SW, 20.0 acres |
|           | NE, NW, SE, SW, 5.0 acres |
|           | Total 25.0 acres |
ORDER RECORD No. 21 --STATE BOARD OF CONTROL

4. Petitioner desires to detach from the following described lands portions of the appropriations described above as follows:

   a. The Farm Investment Company Appropriation, Proof No. 4844.

      Township 51 North, Range 82 West
      Section 25:  
      NE/4:  60.0 acres  21.40 ac. Snider No. 3 & 1, 18.60 ac. Snider No. 3 & 1 as changed to Snider No. 4.
      NW/4:  20.0 acres  Snider No. 3 & 1.
      Total  80.0 acres and 0.86 c.f.s.

   b. The Farm Investment Company Appropriation, Proof No. 4841.

      Township 51 North, Range 82 West
      Section 25:  
      NWSW:  20.00 acres  Snider No. 4
      SWSW:  24.52 acres  Snider No. 4
      SESE:  27.00 acres  Snider No. 4
      Total  71.42 acres and 1.02 c.f.s.

   Total of both appropriations to be changed to preferred use is 1.88 c.f.s. for 131.42 acres of which 0.59 c.f.s. for 41.40 acres are now under the Snider No. 3 & 1 Ditch and 1.29 c.f.s. for 90.02 acres are under the Snider No. 4 Ditch (including 0.27 c.f.s. for 18.60 acres previously changed from Snider No. 3 & 1 Ditch).

5. Petitioner proposes to change the use for the detached water rights from irrigation to preferred use for municipal purposes within the Town of the City of Buffalo. Petitioner further requests a change in point of diversion and means of conveyance for the rights so detached from their record points of diversion through the Snider No. 3 & 1 Ditch and the Snider No. 4 Ditch to the Buffalo Water Wagon Pipeline and Ditch, diverting from Clear Creek at a point located South 40° 50' West, 1943 feet from the Northeast corner of Section 6, Township 50 North, Range 82 West and situated in the SW/4 of said Section 6. Water so diverted through this facility will enter the municipal water distribution system. Petitioner states the additional water will be used during the summer months for irrigation of lawns and parks within the city limits.

6. These petitions were presented to the Board of Control during their regular meeting in November 1971, at which time they were referred to a public hearing. Said hearing was held at Buffalo, Wyoming on April 25, 1974. Due and legal notice of the time and place of the hearing was given in all respects as required by law.

7. During the hearing two protestants testified, namely Mr. Lance Vanderhoeft and Mrs. Eva Anderson. Subsequent to the hearing both parties have signed consents to the petitions which are part of the record.

8. A return flow study was submitted as evidence during the hearing, said study being prepared by Tipton & Rauchbach, Inc., a firm practicing water resource engineering exclusively. This study indicated that the average historical period of use for both the Snider No. 3 & 1 Ditch and the Snider No. 4 Ditch was approximately May 1 through September 30 of each year. The Board feels that a more representative period of use for this area would be June through September or 123 days.

9. This study further shows an annual consumptive use of 1.50 acre-feet per acre, to cover a cropping pattern of hay, irrigated pasture, and other crops grown in the area. For the 131.42 acres involved and 1.50 acre-feet per acre the annual demand would be 197.13 acre-feet (1.50 x 131.42 = 197.13). Converting this figure to second foot days computes as 99.41 (197.13 / 1.983 = 99.41). Using an annual diversion period of 16 May through 15 September amounting to 123 days this computes to 0.808 c.f.s. per day (99.41 / 123 = 0.808 c.f.s.) or rounded to 0.81 c.f.s. at a uniform rate over the entire period.

10. In addition to the consumptive use as computed above, the study also discussed other losses, defined as evaporation from the conveyance system, and transpiration by native vegetation along the ditch banks, evaporation and deep percolation. This amounted to 0.52 acre-feet per acre.
ORDER RECORD No. 21 --STATE BOARD OF CONTROL

(derived from column 4 of Tipton & Kainsbach, Inc. Study as follows: 68.34 acre-feet - 0.52 acre-feet per acre). Using the same formulas as used in paragraph 10 above, a figure of 0.28 c.f.s. per day is obtained. 0.52 acre-feet x 131.62 acres = 68.34 acre-feet; 68.34 - 0.28 c.f.s. per day. However, it was the Board's feeling that these losses are difficult to assess but that some consideration could be given for losses that do not return to the stream and feel that the figure of 0.14 c.f.s. per day should be used. Therefore, the total allowable amount which would be detached would amount to 0.81 c.f.s. + 0.14 c.f.s. or a total of 0.95 c.f.s., diverting at a uniform rate for 123 days during the period 16 May through 15 September.

11. The Board recognized that, in actual practice, a variation in monthly consumptive use occurs, due to variance in the amount of rainfall, hot or cool weather, etc., but felt that it would be impractical to make such a determination because of the small quantity of water involved.

12. There are 16 intervening ditches, including the Hart No. 3 Ditch, between the head gate of the Snider No. 4 Ditch and that of the Buffalo Water Wagon Pipeline and Ditch as well as 13 intervening ditches, including Hart No. 4 Ditch, between the head gate of the Snider No. 3 & 1 Ditch and the Buffalo Water Wagon Pipeline and Ditch. Consent to these petitions were not obtained from owners of these intervening ditches, and there was no evidence presented at the hearing to indicate that the owners of said ditches would be adversely affected or injured in any way by the change to preferred use and change in point of diversion and means of conveyance proposed.

13. There are no intervening sources of supply which will be adversely affected by these changes.

14. A properly prepared map accompanied the petition.

15. The proposed change of use and change in point of diversion and means of conveyance have been field checked by the Division Superintendent and, in his opinion, the requested changes appear sensible, logical and without apparent harm to any other appropriators.

CONCLUSIONS OF LAW

The Findings of Fact contain the elements necessary to comply with Section 41-4, Wyoming Statutes, pertaining to change of water rights from irrigation to preferred use for municipal purposes and petitions, as modified for amount of water authorized, should be granted.

ORDER

It is hereby ordered that these petitions be, and the same are GRANTED, as herein modified and subject to the condition that the changes and transfers as authorized below shall not adversely affect any existing rights in good standing at the time such changes and transfers are made.

It is further ordered that the petitioners be authorized to change a total of 0.95 c.f.s. of water of the 1.88 c.f.s. total appropriations from the appropriations described below to change the rights from irrigation to preferred use for general municipal purposes within the city limits of the Town of the City of Buffalo. This 0.95 c.f.s. of water will only be diverted between the 16th of May through the 15th of September of each year.

a. Part of the Farm Investment Company Appropriation, Territorial Appropriation, Proof No. 4844, priority Spring 1883.

Township 51 North, Range 82 West
Section 237: NW\SW\ 40.00 acres 21.40 acres are under the Snider No. 3 & 1 Ditch, 18.60 acres under Snider No. 4 Ditch.

Total: NW\SW\ 20.00 acres Under Snider No. 3 & 1 Ditch.

60.00 acres

b. Part of the Farm Investment Company Appropriation, Territorial Appropriation, Proof No. 4861, priority April 1883.

Township 51 North, Range 82 West
Section 254: NW\SW\ 20.00 acres

SW\SW\ 24.42 acres All lands under Snider No. 4 Ditch.

SE\SW\ 27.00 acres

Total: 71.42 acres
ORDER RECORD No. 21 -- STATE BOARD OF CONTROL

The remaining 73.58 acres in this appropriation are not affected and are described as follows:

Township 51 North, Range 82 West
Section 25: S:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\:\\
Permit U.W. 1
Buffalo Underground Water Supply No. 1
REGISTRATION OF WELL
FOR
APPROPRIATION AND USE OF UNDERGROUND WATER

(Under Chapter 107, Session Laws of Wyoming, 1947)

WATER DIVISION NO. 2

1. Ernest O. Eder

of Buffalo, County of Johnson, State of Wyoming, being duly sworn
according to law, upon my oath say:

1. The name of the registrant: Town of the City of Buffalo, Wyoming.

2. The postoffice address of the registrant: Buffalo, Wyoming.

3. The use to which the water has been applied: Municipal
(State whether for irrigation, municipal, railway, industrial, domestic, stock)

4. The name of the well: Buffalo Underground Water Supply No. 1
(Designate by name and number)

5. The well is located S. 18° 50' W. 1368' to South 103°
(From course and distance)

NE corner of Section 6 T. 50 N. R. 82 W., and is in the...NE1/4
(Designate subdivision)

6. The type of well is: Dug
(If dug, dug, driven or jetted)

7. The depth of the well is: 18
feet. As reported November 24, 1947. As measured September 30, 1947.

8. The depth of water in the well below land surface is: 11.0
feet. As reported November 24, 1947. As measured on September 30, 1947.

9. The diameter of well at top is: 24
inches, and at bottom 24
inches.

10. The kind of casing used, if any, is: 12 gauge, corrugated, galvanized steel pipe.

11. Type of pump, if any: Capacity of pump: Gal. per min.
(See, centrifugal, turbine, rotary, plunger)

12. Method of operation: gravity flow, drain into city water main
(Electrical motor, steam or gasoline engine)

13. Amount of water claimed: 2.20
hundred cubic feet per second or 990.00
gallons per minute.

14. Estimated yield of water per minute: 990.00
gallons.

15. Cost of well and pumping equipment: $10,000.00
Dollars.

16. (a) Date of completion of well: October 30th, 1947.
(b) Date water was first used for beneficial purposes: November 24th, 1947.

17. The land irrigated is described in the following tabulation: (Give irrigable acreage in each legal subdivision and designate ownership
of land. If not used for irrigation, state location of place of use.)

<table>
<thead>
<tr>
<th>Township</th>
<th>Range</th>
<th>Sec</th>
<th>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 N. 82 W.</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>27</td>
<td>For municipal purposes within the corporate limits of the</td>
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<td>35</td>
<td>Town of the City of Buffalo, Wyoming</td>
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</tbody>
</table>

TOTAL NUMBER OF ACRES TO BE IRRIGATED:

18. Depth at which main source of water was encountered is: 11.00
feet, and the water bearing formation is
Granite boulders and gravel.
(Sand gravel, shale, clay, limestone, sandstone, etc.)

19. If other water sources were found give depth to each: none
feet.

(Signed) Ernest O. Eder.

THE STATE OF WYOMING

County of Johnson

I hereby certify that the foregoing registration was signed in my presence and sworn to before me by

Ernest O. Eder this 24th day of November, 1947.

R. E. Rose,
Notary Public

My Commission Expires March 1, 1951
REMARKS:
Locate well and acreage of irrigated land on plat.
Scale: 2 inches = 1 mile

LOG OF WELL

<table>
<thead>
<tr>
<th>KIND OF ROCK OR OTHER MATERIAL.</th>
<th>DEPTH, IN FEET</th>
<th>THICKNESS, IN FEET</th>
<th>REMARKS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Granite boulders and gravel</td>
<td>0.00</td>
<td>18.00</td>
<td>2.2 B. Cpl. per 100 ml. (Soft).</td>
<td></td>
</tr>
</tbody>
</table>

THE STATE OF WYOMING,  
State Engineer's Office,  
This instrument was received and filed for record on the 26th day of November, A. D. 1947, at 10:00 o'clock A.M.  
Recorded in Book 1 of Underground Water, Well Registrations, on Page 1  
State Engineer.
Permit U.W. 42

Clear Creek No. 2
APPLICATION FOR PERMIT TO APPROPRIATE THE
UNDERGROUND WATERS OF THE STATE OF WYOMING

(Under Chapter 169, Session Laws of Wyoming, 1957)

WATER DIVISION NO. TWO

1. Lee D. Moffett, of Buffalo

County of Johnson, State of Wyoming, being duly sworn
according to law, upon my oath say:

1. The name of the applicant City of Buffalo.

2. The postoffice address of the applicant Buffalo, Wyoming.

3. The use to which the water is to be applied is Municipal.

4. The name of the proposed well is Clear Creek No. 2.

5. The well is to be located in

SE \NE, Section 6

of Section SIX, T. 50 N., R. 82 W., on land owned by

City of Buffalo.

6. The type of the proposed well is Dug trench

7. The estimated depth of the well is to be 25 feet.

8. The approximate depth to the water table below land surface is 11 feet.

9. The diameter of well at top is to be 18 inches, and at bottom 18 inches.

10. The kind of casing used, if any, is to be 18" perforated.

11. Type of pump, if any, none. Capacity of Pump, Gal. per min.

12. Type of power Gravity. Horsepower of engine or motor.

13. Construction of well will begin within one year from date of approval of this application.

14. Completion of the construction and completion of the application of water to the beneficial uses stated in this application will be made within two years from date of approval of this application.

15. Estimated yield of water from proposed well 448.83 gallons per minute.

16. Estimated cost of well and pumping equipment 50,000 Dollars.

17. If for irrigation, the land proposed to be irrigated should be described in the following tabulation.

(Give irrigable acres in each legal subdivision and designate ownership of land. If proposed use is for supplemental supply for lands with a right from another source, indicate in the tabulation the priority or Permit Number, the source of supply and the name of the ditch or other well. If not used for irrigation, state type, method and place of use.)

<table>
<thead>
<tr>
<th>Township</th>
<th>Range</th>
<th>Sec.</th>
<th>NE\1/4</th>
<th>NW\1/4</th>
<th>SW\1/4</th>
<th>SE\1/4</th>
<th>NE\1/4</th>
<th>NW\1/4</th>
<th>SW\1/4</th>
<th>SE\1/4</th>
<th>TOTALS</th>
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<tr>
<td>To be used for Municipal purposes within the City of Buffalo.</td>
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</table>

TOTAL NUMBER OF ACRES TO BE IRRIGATED
PERMIT NO. U.W. 42

April 13, 1960 - Time for completion and completion of beneficial use extended to December 31, 1961.

Earl Lloyd, State Engineer.

September 15, 1961 - Notice for expiration of time for completion mailed.

September 15, 1961 - Notice for expiration of time for completion of beneficial use mailed.

November 30, 1961 - Time for completion and completion of beneficial use extended to December 31, 1962.

Earl Lloyd, State Engineer.

September 14, 1962 - Notice of expiration of time for completion mailed.

September 14, 1962 - Notice of expiration of time for completion of beneficial use mailed.

October 22, 1962 - Time for completion and completion of beneficial use extended to December 31, 1964.

Earl Lloyd, State Engineer.

September 25, 1964 - Notice of expiration of time for completion mailed.

September 25, 1964 - Notice of expiration of time for completion of beneficial use mailed.

October 5, 1964 - Notice of completion of beneficial use on July 28, 1964, received.
Locate well and acreage to be irrigated as accurately as possible on the following plat:

<table>
<thead>
<tr>
<th>R. 83 W.</th>
<th>R. 82 W.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clear Creek No. 2 Well</td>
</tr>
<tr>
<td></td>
<td>T. 50 N.</td>
</tr>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
</tr>
</tbody>
</table>

Remarks: A test well 26 feet deep with 10 inch casing was drilled in this area in 1957. Pump test 120 gal. per min. Log- 0 to 2.5 top soil & boulders, 2.5 to 26 coarse sand - oversize boulders. A test pit with a total depth of 21 feet, water depth of seven feet and water reservoir cap. of 30 cu. yds. was dug in January 1958. Yield 250 gpm. This permit is requested to further test the area.

THE STATE OF WYOMING,
COUNTY OF JOHNSON

I hereby certify that the foregoing application was signed in my presence and sworn to before me by

Lee D. Moffett

(SEAL) My Term of Office Expires First Monday in January 1959
THE STATE OF WYOMING
STATE ENGINEER'S OFFICE

THIS IS TO CERTIFY that I have examined the foregoing application and do hereby grant the same subject to the following limitations and conditions:

The right to be acquired under this permit shall not include the right to have the water level or artesian pressure at the point of diversion maintained at any level higher than that required for maximum beneficial use of available water in the source of supply.

If the well is a flowing artesian well it shall be so equipped that the flow may be shut off when not in use. Provision shall also be made for a threaded tap to which a pressure gage may be attached for determining shut-in pressure when desired.

This permit is granted subject to the condition that it shall not interfere with prior valid and existing rights to the use of the waters of an underground source and use of water hereunder is subject to the further provisions of Chapter 160, Session Laws of Wyoming, 1957.

Rights acquired under this appropriation shall not interfere with rights to surface water appropriations.

Construction of proposed work shall begin within one year from the date of approval.

The time for completing the work and completing the application of water to beneficial use shall terminate on


The amount of appropriation shall be limited to the quantity to which permittee is entitled as determined at time of proof of application of water to beneficial use.

Witness my hand this 29th day of July, A. D. 1958.

Earl Lloyd

THE STATE OF WYOMING
STATE ENGINEER'S OFFICE

This instrument was received and filed for record on the 17th day of March, A. D. 1958, at 9:15 o'clock A. M.

EARL LLOYD

Recorded in Book 1 of Underground Water Permits, on Page 42.
April 3, 1959 - Notice of expiration of time for commencement mailed.
April 13, 1959 - Notice of commencement on April 10, 1959, received.
March 31, 1960 - Notices of expiration of time for completion and beneficial use mailed.
STATEMENT OF COMPLETION OR ABANDONMENT OF PERMIT NO. U.W. 42
UNDERGROUND WATERS

(Under Chapter 169, Session Laws of Wyoming, 1957)

WATER DIVISION NO. Two
UNDERGROUND WATER DISTRICT Johnson County
1. Lee D. Moffett, City of Buffalo
County of Johnson, State of Wyoming, being duly sworn according to law, upon my oath say:

1. The name of the permittee or present owner . City of Buffalo.

2. The postoffice address of the permittee or present owner . Buffalo, Wyoming.

3. The name of the well is Clear Creek No. 2, center of galley

4. Description of well: Location, S,17° 45' W, 1345 feet from the Northeast corner of Section 6, T. 50 N., R. 82 W., and is in the

5. If well under this permit is to be abandoned, please state reasons for abandonment. (If well has been abandoned, it will not be necessary to complete the balance of this form, except for log of well, Item 14, and signature before a Notary Public).

6. Description of pump: Make none; type . Gravity flow
rated capacity of pump gal. per minute.

7. Description of power plant: Method of operation . Electric motor or gasoline engine, etc.
Horsepower of engine or motor .

8. Give date pump and power plant were installed and works completed .

9. Record of Pumping Test (to be supplied by person or firm making test; Name and address of person making test)
Measurements made with 90° V Notch Weir, by Lee D. Moffett, Buffalo, Wyo.
date of test . July 6 & July 28, 1964; depth to water before test, Varies feet, and immediately afterward no change feet; Length of test, one hours; average discharge, 812 & 790 Gal. per minute.

10. Actual cost of well and pumping equipment . 50,000 Dollars.
11. If well is for irrigation purposes, and acreage to be served by well differs from lands described in permit, please re-describe lands in space below:


12. Depth at which main source of water was encountered is ________ feet, and the water bearing formation is ________.

(Sand, gravel, shale, clay, limestone, sandstone, etc.)

13. If other water sources were found give depth to each.

____________________ feet.

____________________ feet.

14. LOG OF WELL

<table>
<thead>
<tr>
<th>TYPE OF MATERIAL ENCOUNTERED</th>
<th>DEPTH IN FEET</th>
<th>THICKNESS IN FEET</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black top soil &amp; boulders</td>
<td>0 to 2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Oversize boulders &amp; gravel</td>
<td>2 to 25</td>
<td>23</td>
<td>Water bearing</td>
</tr>
</tbody>
</table>

Remarks:

THE STATE OF WYOMING,
COUNTY OF Johnson

I hereby certify that the foregoing statement was signed in my presence and sworn to before me by

Lee D. Moffett

(Signed) Lee D. Moffett

Date of Receipt October 5, 1964

Floyd Bishop
Appendix B

Wyoming Water Law Summary
Authors:
James J. Jacobs, Associate Dean and Director, Agricultural Experiment Station
Patrick T. Tyrrell, State Engineer
Donald J. Brosz, Professor Emeritus
Wyoming water law dates back to territorial days and is based on the “doctrine of prior appropriation.” Under this doctrine, the first person to put the water to beneficial use has the first right, meaning “first in time is first in right.” Therefore, water rights in Wyoming and in most of the western states are regulated by priority. Those with the earliest rights are entitled to water during periods of limited supply while those with later rights are denied water during such times.

The Wyoming Constitution provides that water from all natural streams, springs, lakes, and other collections is the property of the state.

Water Administration
The state engineer is the chief administrator of Wyoming waters. To manage these waters, the state is divided into four water divisions. Water Division 1 includes the North Platte, South Platte, Little Snake, and Niobrara river drainages. Water Division 2 includes all drainages north of the Niobrara and North Platte river drainages and east of the Big Horn Mountains. Water Division 3 includes the Big Horn and Clark’s Fork river drainages, and Water Division 4 includes the Green, Bear, and Snake river drainages.

A water division superintendent administers the waters of each water division with assistance from water and hydrographer commissioners. The four superintendents and the state engineer constitute the state board of control. The board meets quarterly to adjudicate or finalize water rights and to consider other matters pertaining to water rights such as changes in points of diversion, the approval of amendments, and the addition of corrections.

The state engineer’s office may be contacted for necessary forms and information through written correspondence or the Internet.

State Engineer’s Office
4th Floor East
Herschler Building
Cheyenne, WY 82002-0370
e-mail: seoleg@state.wy.us
Web site: www.seo.state.wy.us

Information also can be obtained from each of the water division superintendents’ offices, which are located in the following cities:

Water Division 1: Torrington
Water Division 2: Sheridan
Water Division 3: Riverton
Water Division 4: Cokeville
Prior to Wyoming statehood in 1890, a water right could be established by a procedure predicated on the use of water and the filing of a claim with territorial officials. Water rights with priority dates before 1890 are termed “territorial” water rights. Since statehood, the only way a water right can be acquired in Wyoming is by securing a permit from the state engineer. Water rights cannot be obtained by means of historic use or adverse possession. Wyoming water law requires that certain procedures be followed to obtain a valid water right. Following is a summary of these procedures for surface water and groundwater.

**Surface Water**

Wyoming’s first surface water laws were enacted in 1875. More comprehensive laws were adopted along with the state constitution in 1890. These laws state:

- If an individual, association, or corporation wants to use surface water, the interested party must first apply to the state engineer for a permit. Application forms are available from the state engineer’s office, water division superintendents’ offices, and county clerks’ offices.

- An engineer or surveyor licensed to practice in Wyoming must make a survey and prepare the maps and plans needed to apply for a permit. Generally, this engineer or land surveyor also possesses the necessary application forms.

- Whoever is applying should submit an application form, maps, and plans along with a filing fee to the state engineer in one package of documents. A priority date is established by the date of an application’s acceptance in the state engineer’s office.
Upon approval of the application, the state engineer issues a permit for developing the proposed water project.

- The project must be completed within the time frame specified on the approved permit.
- The state engineer must be notified on the appropriate forms when construction was completed and when the water was put to beneficial use. These forms are provided with the approved permit.
- If, in the time prescribed, the project cannot be completed and the water cannot be put to use, the applicant may ask the state engineer to extend any or all of the time limits. The applicant should make the request before the original time limits expire and cite good cause for needing an extension. If an extension is granted, the date of priority remains the same.

After the water has been put to beneficial use (or a reservoir constructed) and the construction completion and beneficial use notices have been submitted, a final proof of appropriation or construction must be submitted to the appropriate water division superintendent. This proof is then advertised in a local newspaper, and an inspection of the project is made. Only lands found to be irrigated or with uses developed or being used as reservoirs to store water will be accepted for adjudication. If the paperwork is in order and no protests are filed, a proof is submitted to the board of control. If the board approves the application, a certificate of appropriation and/or construction is issued and recorded in the county clerk’s office in the county where the project is located as well as in the state engineer’s office. It is then listed in the tabulation of adjudicated rights for the respective division as evidence of an adjudicated water right. Once adjudicated, the water right is permanently attached to the specific land or place of use described on the certificate of appropriation and cannot be removed or changed except by action of the board of control. (See Page 8.) The adjudicated water right takes its place in the list of priorities for that particular stream. Water is delivered to that right only when sufficient water is available to meet all earlier water rights on the stream.

Limits on unstored water for irrigation:

- Water rights for irrigation are adjudicated on the basis of 1 cubic foot per second (cfs) per 70 acres.
- Irrigation rights with priority dates of March 1, 1945, or earlier are entitled to an additional 1 cfs per 70 acres. Those individuals who hold such a water right are entitled to divert water in the volume of 2 cfs for each 70 acres of land before any water is made available to the holder of a water right with a priority date after March 1, 1945.

If there is not sufficient water to furnish 2 cfs to each individual with a pre-March 1, 1945, water right but there is more than enough to furnish 1 cfs to each person, the surplus water is divided on a pro-rata basis. If there is so little water that each holder of a pre-March 1, 1945, water right cannot receive 1 cfs, the water is regulated on a strict priority basis.

Any water beyond that required to furnish 2 cfs for each 70 acres of a pre-March 1, 1945, water right is first allocated to rights with priority dates after March 1, 1945, and before March 1, 1985. Wyoming’s Excess Water Law
states that each water right with a priority date of post-March 1, 1945, but pre-March 1, 1985, is entitled to 2 cfs per 70 acres before any water is made available to post-March 1, 1985, water rights. If there is not sufficient water to furnish 2 cfs to each post-March 1, 1945, and pre-March 1, 1985, water right, but there is more than enough to furnish 1 cfs to each of these rights, the excess water is divided among the rights on a pro-rata basis.

If there is so little water that each post-March 1, 1945, and pre-March 1, 1985, water right cannot receive 1 cfs, the rights are regulated on a strict priority basis. Post-March 1, 1985, water rights are entitled to 1 cfs per 70 acres only after all pre-March 1, 1985, rights have received 2 cfs per 70 acres.

When additional streamflow is available, it is not illegal to divert more than one’s amount of appropriation when prior rights are satisfied, the stream is not in regulation, and such water is not wasted as determined by the division superintendent or the local water commissioner.

**Simplified Filing Procedures**

For some water facilities and developments, a simplified filing process that does not require maps and plans prepared by a registered engineer or surveyor is acceptable. The following types of water uses are covered under the surface water special application procedure:

- Construction of small reservoirs for stock purposes, fishing-reserve waters, and wetland ponds where the capacity of such a reservoir does not exceed 20 acre feet of water or the height of the dam does not exceed 20 feet.

- Construction of flood-detention dams that:
  - Store 50 acre feet of water or less;
  - Have a dam height not exceeding 20 feet;
  - Have, as a minimum, an outlet 18 inches in diameter; and
  - Have a dead storage that does not exceed 20 acre feet.

- Development of springs filed by one of two methods depending upon the rate of flow and how the water will be applied. The conditions that determine the method to use are described below.
  - If the spring flows 25 gallons per minute (gpm) or less and if the water is to be used only for stock watering and/or domestic uses, which include watering lawns and gardens not exceeding 1 acre in size, the spring must be filed as groundwater. No map is required. After the approval of the application, some type of artificial diversion...
must be constructed to qualify for a water right. The proposed method of spring development and the means of conveying the water to the point of use must be described on the application under the section entitled “Remarks.”

- If the spring flows in excess of 25 gpm (0.056 cfs) and is to be used for stock purposes only, surface water special application procedures must be followed. The use will be limited to 25 gpm (0.056 cfs).
- All springs flowing in excess of 25 gpm (0.056 cfs) or designated for other uses will be filed using surface water filing procedures. (See Page 2.)
- Domestic uses of water directly from a stream, which can be permitted under the special application process for uses up to 25 gpm.
- Any system using a catchment apron to collect direct flow for storage in a cistern or tank for later use in a guzzler (drinking trough), which can be filed using surface water special application procedures.

**Reservoir Storage**

A reservoir is entitled to be filled in priority once each year if water is available. If water remains unused in the reservoir at the end of the normal use period, the water is designated as carry-over storage and counts toward providing water to meet the following year’s supply for appropriation. Storage water may be attached by a secondary permit to specific lands or places of use.

**Instream flow**

The 1986 legislature declared that instream flow for maintenance or improvement of existing stream fisheries is a beneficial use of water that can be provided from natural stream flows or from storage water. A statutory procedure was established for the state and represented by the Wyoming Water Development Commission (WWDC) to appropriate specified flow rates for instream flows in segments of streams identified by the studies and reports of the Wyo-
The WWDC must conduct a hydrologic study to determine whether the instream flow can be provided from the natural flow of the stream or whether storage water from an existing or new reservoir will be needed for part or all of the instream flow. The WWDC report is supplied to the state engineer for consideration. If storage water is needed from a new reservoir project, normal legislative project authorization procedures must be followed by WWDC.

After receiving reports from the game and fish commission and WWDC, the state engineer may conduct an evaluation of the proposed appropriations for instream use. Before granting or denying a permit for instream flow in the specified stream segment, the state engineer must conduct a public hearing and consider all available reports and information. If granted, an instream flow permit can contain a condition for a review of the continuation of the permit at a future time.

The instream flow appropriation goes into effect the date the state engineer approves the permit. The water right cannot be adjudicated by the board of control for three years thereafter. The instream water right priority date is the date the application was received and recorded by the state engineer, and all senior priority water rights must be recognized in the administration of the stream. A change of use to instream flow from existing water rights may be sought through a petition to the board of control in which the state becomes the owner of the changed right.

The state engineer cannot issue an instream flow permit if it will result in the loss of a portion of Wyoming’s consumptive share of water allocated by an interstate compact or a U.S. Supreme Court decree or if it will result in more water leaving Wyoming than is allocated for uses downstream.

Other persons can appropriate water downstream from an instream flow segment to within one mile of the Wyoming state line or within one mile upstream from state line reservoirs on the Big Horn, Green, and Snake rivers or within one mile of the main stem of the North Platte River.

Groundwater

The first Wyoming groundwater laws were enacted in 1945 and amended in 1947. A new groundwater law went into effect March 1, 1958, repealing and replacing the 1945 and 1947 laws. Major amendments were made in 1969.

Priority of Wells

- For all wells drilled prior to April 1, 1947, the priority date is the date the well was completed if a claim for the well was filed before March 1, 1958, as provided by the law.
- For wells drilled between April 1, 1947, and March 1, 1958, the date the well was registered established its priority date.
- After March 1, 1958, the priority date is the date the application for a permit to drill the well is accepted in the state engineer’s office.
• An exception to the above is a well used solely for stock and/or domestic purposes. Until the enactment of the 1969 amendment to the groundwater law, such wells were exempt from filing and held a preferred right over wells used for all other purposes.

• Under the 1969 amendment, all domestic and/or stock wells drilled after May 24, 1969, and all wells drilled for other purposes establish priority on the date an application for permission to drill is received in the state engineer’s office.

• Under the 1969 amendment, all domestic and/or stock wells drilled and used before May 24, 1969, and registered with the state engineer before December 31, 1972, established a priority date as of each well’s completion and water use.

Domestic and Stock Water Uses (Groundwater)
The law defines domestic use as household use including lawn and garden watering for non-commercial family use where the area to be irrigated does not exceed 1 acre. The quantity of water to be pumped for family or stock use cannot exceed 25 gpm. A well may supply water to more than one but not more than three single-family dwellings and still be considered a domestic use provided that:

• The yield does not exceed 25 gpm;

• The total area of lawns and gardens to be watered does not exceed 1 acre;

• No charge, hidden or otherwise, is levied for the use of the water; and

• The water is not used in conjunction with a commercial endeavor.

Stock-watering use is defined as normal livestock watering. This includes any project whereby water will be piped to no more than four points of use within one mile of a well. Large feedlot operations or any project whereby the water will be piped to five or more points of use or where the points of use are greater than one mile from the well are considered miscellaneous use.

Groundwater Permitting Procedures
The same general procedures for acquiring surface water rights apply to acquiring groundwater rights.

• Before a well is drilled, an application must be filed and approved by the state engineer. This requirement applies to all wells used for any purpose.

• Forms to be filed with the state engineer are available from that office, water division superintendents’ offices, and county clerks’ offices.

• A permit to construct a well will generally be granted as a matter of course by the state engineer. An exception could occur in a groundwater control area. The board of control may designate a groundwater control area where:

  • The use of groundwater is approaching a use equal to the current recharge rate,

  • Groundwater levels are declining or have declined excessively,
The waste of water is occurring or may occur, and

Other conditions exist or may arise that require regulation for protection of the public interest.

A well must be completed and the water applied to beneficial use before the dates specified on the permit. The proper notice(s) verifying compliance must then be submitted to the state engineer’s office.

If an individual cannot complete construction of the well or put the water to use in the time prescribed, an extension may be requested (in writing) to the state engineer. “Good cause” should be stated in the request.

A plat showing the location of the well(s) and the point(s) of use and the distribution system is required when the final proof of appropriation and beneficial use is filed.

This plat must be certified by an engineer or land surveyor licensed to practice in Wyoming.

After the final proof of appropriation has been filed, the division water superintendent inspects the project, and the proof is advertised. If everything is in order and no protests are filed, a certificate of appropriation is issued by the board of control. The certificate is recorded in both a county clerk’s office and in the state engineer’s office. This is evidence of an adjudicated water right.

Changes in Well Location and Depth

Well locations and other changes may be made without loss of priority if the following conditions are met:

- The new well location is in the same aquifer and in the same general vicinity as the old location,
- Permission is obtained from the board of control for any well relocation where the beneficial use of the water is for something other than stock or domestic and the water has been put to beneficial use,
- Permission is obtained from the state engineer for any stock or domestic well relocation and any well relocation for other types of wells where the water has not yet been put to beneficial use, and
- Temporary changes in well location requiring approval by the board of control can be approved by the division superintendent.

Special Water Right Conditions for Groundwater

- A permit to appropriate groundwater carries with it no guarantee of a continued water level or artesian pressure.
• Where underground waters in different aquifers are so interconnected as to constitute one source of supply or where underground water and surface water are so interconnected as to constitute one source of supply, priorities of rights to the use of the interconnected waters must be correlated and a single schedule of priorities must relate to the common water supply.

• By-product water is water that has not been put to prior beneficial use, is a by-product of some nonwater-related economic activity, and has been developed only as a result of another activity such as oil and gas production or mining.

Preferred Uses
Wyoming water law defines the preferred uses of both surface water and groundwater and lists them in the following order:

• Drinking water for both humans and livestock;
• Water for municipal purposes;
• Water for steam engines, general railway use, cooking, laundering, bathing, refrigerating (including ice manufacturing), steam and hot-water heating plants, and steam power plants; and
• Water for industrial purposes.

Non-Preferred Uses
All water uses other than those listed as preferred uses are considered non-preferred. When a water supply is insufficient to meet water rights, rights with a preferred use do not take precedence over a non-preferred use. The priority date of a water right, preferred or non-preferred, determines who is entitled to water. The only way to obtain a preferred right from a non-preferred prior right is by purchase or condemnation through court action. The right of condemnation cannot be used by industrial concerns to obtain water rights. However, groundwater wells yielding 25 gpm or less and used solely for domestic and stock purposes do have preferred rights over wells for all other uses, regardless of their priority dates.

For example, someone with an irrigation water right (non-preferred use) with an early priority is entitled to use water even when it may involve denying water to a municipality (preferred use) with a later right. The municipality may acquire, through condemnation if necessary, the earlier irrigation right and change it to municipal use provided just compensation is paid.

Keeping Water Rights Valid
To keep a water right valid when changes are made in the point of diversion, the location of a well, the location of an irrigation ditch, or similar circumstances, permission must be secured. If the water right is adjudicated, one should petition the board of control. If it is not adjudicated, the petition should be sent to the state engineer’s office.

In most instances, obtaining permission for changes does not change the priority date of the water right but keeps the water right up to date and legal. Public hearings on changes may
be held to ensure that no injury occurs to other water-right holders because of the change. One should keep a water right in proper standing so that no legal questions are raised concerning its validity.

**Change in Use**

An individual who owns an adjudicated water right and wishes to change it from its current use or from its place of use must file a petition with the board of control requesting permission for a change. When requesting a change in place of use, all pertinent information about the existing use and the proposed place of use should be specified in the petition. The board of control may require that an advertised public hearing be held at a petitioner’s expense. A petitioner must provide a transcript of the public hearing to the board of control. A change in use or change in place of use may be allowed.

If such an allowance is granted, the quantity of water transferred by the granting of the petition should not exceed the amount of water historically diverted under the existing use. Furthermore, the historic rate of water diversion and the amount consumed cannot exceed that diverted and consumed under the existing use. Finally, such a petition, if allowed, should not decrease the historic amount of return flow or in any manner injure other existing lawful appropriators. The board of control will consider all facts it believes to be pertinent to a transfer. These may include the following:

- The economic loss to the community and the state if the use from which the right is transferred is discontinued,
- The extent to which such economic loss will be offset by the new use, and
- Whether other sources of water are available for the new use.

In all cases in which the matter of compensation is in dispute, the question of compensation shall be submitted to the proper district court for determination.

**Subdivisions with Attached Water Rights**

Wyoming law provides that any time a parcel of land with water rights attached is subdivided, the developer must dispose of the water rights in one of three ways:

- Voluntarily abandon the water rights, removing them from the land forever;
- Transfer the water rights to other owned lands that have no other water rights from the same source; or
- Develop a subdivision irrigation plan showing which lands have the water rights, the amount of the water rights, the location of supply and waste ditches, and other information necessary for the protection of individual lot owners in retaining water rights on the land.

Each of these actions requires review by the state engineer’s office or the board of control before the subdivision can be approved by the respective county.
Water Right Abandonment

A water right for surface water or groundwater not used for five successive years (when water is available to satisfy the right) is considered abandoned, but a statutory procedure must be followed to bring about legal abandonment. The law provides a procedure for abandonment. The abandonment process must be initiated by an affected water user who has a priority equal or junior to the right being abandoned or by the state engineer. If a right is declared abandoned, the user forfeits all water rights, easements, ditch rights, and the like, and the water again becomes subject to appropriation. Water must have been available but not used for an abandonment to take place.

Wyoming law provides standing so that abandonment action can be brought by a pre-March 1, 1945, water-right holder against a senior pre-March 1, 1945, water-right holder to protect the right to surplus water.

Wyoming Water Law and Related Principles

To accommodate the administrative realities of Wyoming water law, the following principles are followed:

- Beneficial use is the basis, measure, and limit to the right to use water at all times.
- To bring about a more economical use of an available water supply, two or more water rights’ owners may rotate the their combined water in priority after obtaining the permission of the water commissioner.
- The water right owner is responsible for ditch maintenance so that the water does not flood or damage the property of others.
- The water right owner is responsible at all times for waste water.
- Priority regulation is not automatic. Water appropriators may elect to decline calling for state regulation.
- In administering water to the various appropriations on a stream, the state is obligated to attempt to deliver the full amount of any appropriation in priority at its headgate out of the stream. Any ditch loss between the head gate and the appropriator’s land is the responsibility of the appropriator.
- During regulation by the state, tagged diversions may not be tampered with under penalty of law.
- Temporary rights to water uses for oil well drilling, highway construction, etc., may be granted by the state engineer upon submission of a proper application.
- If a case where a ditch was in place before any houses or other property, the property owners are compelled to protect themselves from any damage created by seepage from the ditch. If, because of seepage, a newly built ditch creates damage to property that was present before the ditch was built, the ditch owners shall be liable for any damage.
- During extreme shortages, instream stock-water use may be declared against diversions.
Interstate Compacts and Court Decrees
As a headwaters’ state, Wyoming is party to seven interstate compacts, two U.S. Supreme Court decrees, and one U.S. District Court decree. Many of the river basins have established interstate commissions to ensure compliance with the allocations made under these compacts and decrees.

Summary
In Wyoming, a valid right to the use of water may be acquired only by following the procedures established by state law for both surface water and groundwater.

Water users should be sure of the status of their water rights. A way to accomplish this is to check the records in a county clerk’s office or at the state engineer’s office. The records indicate an appropriation amount, the priority of the right, and how and where the water is to be used. If there are any questions, check with the state engineer’s office and request complete information on the status of the water right in question.
Appendix C

EPA Primary and Secondary Drinking Water Standards
<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL or TT&lt;sup&gt;1&lt;/sup&gt; (mg/L)&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Potential health effects from long-term&lt;sup&gt;3&lt;/sup&gt; exposure above the MCL</th>
<th>Common sources of contaminant in drinking water</th>
<th>Public Health Goal (mg/L)&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylamide</td>
<td>TT&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Nervous system or blood problems; increased risk of cancer</td>
<td>Added to water during sewage/wastewater treatment</td>
<td>zero</td>
</tr>
<tr>
<td>Alachlor</td>
<td>0.002</td>
<td>Eye, liver, kidney or spleen problems; anemia; increased risk of cancer</td>
<td>Runoff from herbicide used on row crops</td>
<td>zero</td>
</tr>
<tr>
<td>Alpha/photon emitters</td>
<td>15 picocuries per Liter (pCi/L)</td>
<td>Increased risk of cancer</td>
<td>Erosion of natural deposits</td>
<td>zero</td>
</tr>
<tr>
<td>Antimony</td>
<td>0.006</td>
<td>Increase in blood cholesterol; decrease in blood sugar</td>
<td>Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder</td>
<td>0.006</td>
</tr>
<tr>
<td>Arsenic</td>
<td>0.010</td>
<td>Skin damage or problems with circulatory systems, and may have increased risk of getting cancer</td>
<td>Erosion of natural deposits; runoff from orchards; runoff from glass &amp; electronics production wastes</td>
<td>0</td>
</tr>
<tr>
<td>Asbestos (fibers &gt;10 micrometers)</td>
<td>7 million fibers per Liter (MFL)</td>
<td>Increased risk of developing benign intestinal polyps</td>
<td>Decay of asbestos cement in water mains; erosion of natural deposits</td>
<td>7 MFL</td>
</tr>
<tr>
<td>Atrazine</td>
<td>0.003</td>
<td>Cardiovascular system or reproductive problems</td>
<td>Runoff from herbicide used on row crops</td>
<td>0.003</td>
</tr>
<tr>
<td>Barium</td>
<td>2</td>
<td>Increase in blood pressure</td>
<td>Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits</td>
<td>2</td>
</tr>
<tr>
<td>Benzene</td>
<td>0.005</td>
<td>Anemia; decrease in blood platelets; increased risk of cancer</td>
<td>Discharge from factories; leaching from gas storage tanks and landfills</td>
<td>zero</td>
</tr>
<tr>
<td>Benzo(a)pyrene (PAHs)</td>
<td>0.0002</td>
<td>Reproductive difficulties; increased risk of cancer</td>
<td>Leaching from linings of water storage tanks and distribution lines</td>
<td>zero</td>
</tr>
<tr>
<td>Beryllium</td>
<td>0.004</td>
<td>Intestinal lesions</td>
<td>Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries</td>
<td>0.004</td>
</tr>
<tr>
<td>Beta photon emitters</td>
<td>4 millirems per year</td>
<td>Increased risk of cancer</td>
<td>Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation</td>
<td>zero</td>
</tr>
<tr>
<td>Bromate</td>
<td>0.010</td>
<td>Increased risk of cancer</td>
<td>Byproduct of drinking water disinfection</td>
<td>zero</td>
</tr>
<tr>
<td>Cadmium</td>
<td>0.005</td>
<td>Kidney damage</td>
<td>Corrosion of galvanized pipes; erosion of natural deposits; runoff from waste batteries and paints</td>
<td>0.005</td>
</tr>
<tr>
<td>Carbofuran</td>
<td>0.04</td>
<td>Problems with blood, nervous system, or reproductive system</td>
<td>Leaching of soil fumigant used on rice and alfalfa</td>
<td>0.04</td>
</tr>
<tr>
<td>Carbon tetrachloride</td>
<td>0.005</td>
<td>Liver problems; increased risk of cancer</td>
<td>Discharge from chemical plants and other industrial activities</td>
<td>zero</td>
</tr>
<tr>
<td>Chloramines (as Cl&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>MRDL=4.0&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Eye/nose irritation; stomach discomfort; anemia</td>
<td>Water additive used to control microbes</td>
<td>MRDLG=4&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Chlorodane</td>
<td>0.002</td>
<td>Liver or nervous system problems; increased risk of cancer</td>
<td>Residue of banned termicide</td>
<td>zero</td>
</tr>
<tr>
<td>Chlorine (as Cl&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>MRDL=4.0&lt;sup&gt;3&lt;/sup&gt;</td>
<td>Eye/nose irritation; stomach discomfort</td>
<td>Water additive used to control microbes</td>
<td>MRDLG=4&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>Chlorine dioxide (as ClO&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>MRDL=0.8&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Anemia; infants, young children, and fetuses of pregnant women; nervous system effects</td>
<td>Water additive used to control microbes</td>
<td>MRDLG=0.8&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>Chlorite</td>
<td>1.0</td>
<td>Anemia; infants, young children, and fetuses of pregnant women; nervous system effects</td>
<td>Byproduct of drinking water disinfection</td>
<td>0.8</td>
</tr>
<tr>
<td>Chlorobenzene</td>
<td>0.1</td>
<td>Liver or kidney problems</td>
<td>Discharge from chemical and agricultural chemical factories</td>
<td>0.1</td>
</tr>
<tr>
<td>Chromium (total)</td>
<td>0.1</td>
<td>Allergic dermatitis</td>
<td>Discharge from steel and pulp mills; erosion of natural deposits</td>
<td>0.1</td>
</tr>
<tr>
<td>Copper</td>
<td>TT&lt;sup&gt;4&lt;/sup&gt;; Action Level = 1.3</td>
<td>Short-term exposure: Gastrointestinal distress. Long-term exposure: Liver or kidney damage. People with Wilson’s Disease should consult their personal doctor if the amount of copper in their water exceeds the action level</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits</td>
<td>1.3</td>
</tr>
<tr>
<td>Cryptosporidium</td>
<td>TT&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Short-term exposure: Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)</td>
<td>Human and animal fecal waste</td>
<td>zero</td>
</tr>
</tbody>
</table>

**LEGEND**
- **D** Disinfectant
- **IOC** Inorganic Chemical
- **OC** Organic Chemical
- **R** Radionuclides
<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL or TT1 (mg/L)²</th>
<th>Potential health effects from long-term³ exposure above the MCL</th>
<th>Common sources of contaminant in drinking water</th>
<th>Public Health Goal (mg/L)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOC Cyanide (as free cyanide)</td>
<td>0.2</td>
<td>Nerve damage or thyroid problems</td>
<td>Discharge from steel/metal factories; discharge from plastic and fertilizer factories</td>
<td>0.2</td>
</tr>
<tr>
<td>OC 2,4-D</td>
<td>0.07</td>
<td>Kidney, liver, or adrenal gland problems</td>
<td>Runoff from herbicide used on row crops</td>
<td>0.07</td>
</tr>
<tr>
<td>OC Dalapon</td>
<td>0.2</td>
<td>Minor kidney changes</td>
<td>Runoff from herbicide used on rights of way</td>
<td>0.2</td>
</tr>
<tr>
<td>OC 1,2-Dibromo-3-chloropropane (DBCP)</td>
<td>0.0002</td>
<td>Reproductive difficulties; increased risk of cancer</td>
<td>Runoff/leaching from soil fungitut used on soybeans, cotton, pineapples, and orchards</td>
<td>zero</td>
</tr>
<tr>
<td>OC o-Dichlorobenzene</td>
<td>0.6</td>
<td>Liver, kidney, or circulatory system problems</td>
<td>Discharge from industrial chemical factories</td>
<td>0.6</td>
</tr>
<tr>
<td>OC p-Dichlorobenzene</td>
<td>0.075</td>
<td>Anemia; liver, kidney or spleen damage; changes in blood</td>
<td>Discharge from industrial chemical factories</td>
<td>0.075</td>
</tr>
<tr>
<td>OC 1,2-Dichloroethane</td>
<td>0.005</td>
<td>Increased risk of cancer</td>
<td>Discharge from industrial chemical factories</td>
<td>zero</td>
</tr>
<tr>
<td>OC 1,1-Dichloroethylene</td>
<td>0.007</td>
<td>Liver problems</td>
<td>Discharge from industrial chemical factories</td>
<td>0.007</td>
</tr>
<tr>
<td>OC cis-1,2-Dichloroethylene</td>
<td>0.07</td>
<td>Liver problems</td>
<td>Discharge from industrial chemical factories</td>
<td>0.07</td>
</tr>
<tr>
<td>OC trans-1,2-Dichloroethylene</td>
<td>0.1</td>
<td>Liver problems</td>
<td>Discharge from industrial chemical factories</td>
<td>0.1</td>
</tr>
<tr>
<td>OC Dichloromethane</td>
<td>0.005</td>
<td>Liver problems; increased risk of cancer</td>
<td>Discharge from drug and chemical factories</td>
<td>zero</td>
</tr>
<tr>
<td>OC 1,2-Dichloropropane</td>
<td>0.005</td>
<td>Increased risk of cancer</td>
<td>Discharge from industrial chemical factories</td>
<td>zero</td>
</tr>
<tr>
<td>OC Di(2-ethylhexyl) adipate</td>
<td>0.4</td>
<td>Weight loss, liver problems, or possible reproductive difficulties</td>
<td>Discharge from chemical factories</td>
<td>0.4</td>
</tr>
<tr>
<td>OC Di(2-ethylhexyl) phthalate</td>
<td>0.006</td>
<td>Reproductive difficulties; liver problems; increased risk of cancer</td>
<td>Discharge from rubber and chemical factories</td>
<td>zero</td>
</tr>
<tr>
<td>OC Dinoseb</td>
<td>0.007</td>
<td>Reproductive difficulties</td>
<td>Runoff from herbicide used on soybeans and vegetables</td>
<td>0.007</td>
</tr>
<tr>
<td>OC Dioxin (2,3,7,8-TCDD)</td>
<td>0.00000003</td>
<td>Reproductive difficulties; increased risk of cancer</td>
<td>Emissions from waste incineration and other combustion; discharge from chemical factories</td>
<td>zero</td>
</tr>
<tr>
<td>OC Diquat</td>
<td>0.02</td>
<td>Cataracts</td>
<td>Runoff from herbicide use</td>
<td>0.02</td>
</tr>
<tr>
<td>OC Endothall</td>
<td>0.1</td>
<td>Stomach and intestinal problems</td>
<td>Runoff from herbicide use</td>
<td>0.1</td>
</tr>
<tr>
<td>OC Endrin</td>
<td>0.002</td>
<td>Liver problems</td>
<td>Residue of banned insecticide</td>
<td>0.002</td>
</tr>
<tr>
<td>OC Epichlorohydrin</td>
<td>TT²</td>
<td>Increased cancer risk; stomach problems</td>
<td>Discharge from industrial chemical factories; an impurity of some water treatment chemicals</td>
<td>zero</td>
</tr>
<tr>
<td>OC Ethylbenzene</td>
<td>0.7</td>
<td>Liver or kidney problems</td>
<td>Discharge from petroleum refineries</td>
<td>0.7</td>
</tr>
<tr>
<td>OC Ethylene dibromide</td>
<td>0.00005</td>
<td>Problems with liver, stomach, reproductive system, or kidneys; increased risk of cancer</td>
<td>Discharge from petroleum refineries</td>
<td>zero</td>
</tr>
<tr>
<td>M Fecal coliform and E. coli</td>
<td>MCL¹</td>
<td>Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes may cause short term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.</td>
<td>Human and animal fecal waste</td>
<td>zero³</td>
</tr>
<tr>
<td>IOC Fluoride</td>
<td>4.0</td>
<td>Bone disease (pain and tenderness of the bones); children may get mottled teeth</td>
<td>Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories</td>
<td>4.0</td>
</tr>
<tr>
<td>M Giardia lamblia</td>
<td>TT²</td>
<td>Short-term exposure: Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)</td>
<td>Human and animal fecal waste</td>
<td>zero</td>
</tr>
<tr>
<td>OC Glyphosate</td>
<td>0.7</td>
<td>Kidney problems; reproductive difficulties</td>
<td>Runoff from herbicide use</td>
<td>0.7</td>
</tr>
<tr>
<td>DBP Haloacetic acids (HAA5)</td>
<td>0.060</td>
<td>Increased risk of cancer</td>
<td>Byproduct of drinking water disinfection</td>
<td>n/a⁴</td>
</tr>
<tr>
<td>OC Heptachlor</td>
<td>0.0004</td>
<td>Liver damage; increased risk of cancer</td>
<td>Residue of banned termicide</td>
<td>zero</td>
</tr>
<tr>
<td>OC Heptachlor epoxide</td>
<td>0.0002</td>
<td>Liver damage; increased risk of cancer</td>
<td>Breakdown of heptachlor</td>
<td>zero</td>
</tr>
<tr>
<td>M Heterotrophic plate count (HPC)</td>
<td>TT²</td>
<td>HPC has no health effects; it is an analytic method used to measure the variety of bacteria that are common in water. The lower the concentration of bacteria in drinking water, the better maintained the water system is.</td>
<td>HPC measures a range of bacteria that are naturally present in the environment</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**LEGEND**

- **D** Disinfectant
- **IOC** Inorganic Chemical
- **OC** Organic Chemical
- **DBP** Disinfection Byproduct
- **M** Microorganism
- **R** Radionuclides
<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL or TT1 (mg/L)</th>
<th>Potential health effects from long-term exposure above the MCL</th>
<th>Common sources of contaminant in drinking water</th>
<th>Public Health Goal (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC Hexachlorobenzene</td>
<td>0.001</td>
<td>Liver or kidney problems; reproductive difficulties; increased risk of cancer</td>
<td>Discharge from metal refineries and agricultural chemical factories</td>
<td>zero</td>
</tr>
<tr>
<td>OC Hexachlorocyclopentadiene</td>
<td>0.05</td>
<td>Kidney or stomach problems</td>
<td>Discharge from chemical factories</td>
<td>0.05</td>
</tr>
<tr>
<td>IOC Lead</td>
<td>TT5; Action Level=0.015</td>
<td>Infants and children: Delays in physical or mental development; children could show slight deficits in attention, span and learning abilities; Adults: Kidney problems; high blood pressure</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits</td>
<td>zero</td>
</tr>
<tr>
<td>M Legionella</td>
<td>TT7</td>
<td>Legionnaire’s Disease, a type of pneumonia</td>
<td>Found naturally in water; multiplies in heating systems</td>
<td>zero</td>
</tr>
<tr>
<td>OC Lindane</td>
<td>0.0002</td>
<td>Liver or kidney problems</td>
<td>Runoff/leaching from insecticide used on cattle, lumber, gardens</td>
<td>0.0002</td>
</tr>
<tr>
<td>IOC Mercury (inorganic)</td>
<td>0.002</td>
<td>Kidney damage</td>
<td>Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands</td>
<td>0.002</td>
</tr>
<tr>
<td>OC Methoxychlor</td>
<td>0.04</td>
<td>Reproductive difficulties</td>
<td>Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock</td>
<td>0.04</td>
</tr>
<tr>
<td>IOC Nitrate (measured as Nitrogen)</td>
<td>10</td>
<td>Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td>
<td>10</td>
</tr>
<tr>
<td>IOC Nitrite (measured as Nitrogen)</td>
<td>1</td>
<td>Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td>
<td>1</td>
</tr>
<tr>
<td>OC Oxamyl (Vydate)</td>
<td>0.2</td>
<td>Slight nervous system effects</td>
<td>Runoff/leaching from insecticide used on apples, potatoes, and tomatoes</td>
<td>0.2</td>
</tr>
<tr>
<td>OC Pentachlorophenol</td>
<td>0.001</td>
<td>Liver or kidney problems; increased cancer risk</td>
<td>Discharge from wood-preserving factories</td>
<td>zero</td>
</tr>
<tr>
<td>OC Picloram</td>
<td>0.5</td>
<td>Liver problems</td>
<td>Herbicide runoff</td>
<td>0.5</td>
</tr>
<tr>
<td>OC Polychlorinated biphenyls (PCBs)</td>
<td>0.0005</td>
<td>Skin changes; thymus gland problems; immune deficiencies; reproductive or nervous system difficulties; increased risk of cancer</td>
<td>Runoff from landfills; discharge of waste chemicals</td>
<td>zero</td>
</tr>
<tr>
<td>R Radium 226 and Radium 228 (combined)</td>
<td>5 pCi/L</td>
<td>Increased risk of cancer</td>
<td>Erosion of natural deposits</td>
<td>zero</td>
</tr>
<tr>
<td>IOC Selenium</td>
<td>0.05</td>
<td>Hair or fingernail loss; numbness in fingers or toes; circulatory problems</td>
<td>Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines</td>
<td>0.05</td>
</tr>
<tr>
<td>OC Simazine</td>
<td>0.004</td>
<td>Problems with blood</td>
<td>Herbicide runoff</td>
<td>0.004</td>
</tr>
<tr>
<td>OC Styrene</td>
<td>0.1</td>
<td>Liver, kidney, or circulatory system problems</td>
<td>Discharge from rubber and plastic factories; leaching from landfills</td>
<td>0.1</td>
</tr>
<tr>
<td>OC Tetrachloroethylene</td>
<td>0.005</td>
<td>Liver problems; increased risk of cancer</td>
<td>Discharge from factories and dry cleaners</td>
<td>zero</td>
</tr>
<tr>
<td>IOC Thallium</td>
<td>0.002</td>
<td>Hair loss; changes in blood; kidney, intestine, or liver problems</td>
<td>Leaching from ore-processing sites; discharge from electronics, glass, and drug factories</td>
<td>0.0005</td>
</tr>
<tr>
<td>OC Toluene</td>
<td>1</td>
<td>Nervous system, kidney, or liver problems</td>
<td>Discharge from petroleum factories</td>
<td>1</td>
</tr>
<tr>
<td>M Total Coliforms</td>
<td>5.0 percent^6</td>
<td>Coliforms are bacteria that indicate that other, potentially harmful bacteria may be present. See fecal coliforms and E. coli</td>
<td>Naturally present in the environment</td>
<td>zero</td>
</tr>
<tr>
<td>DBP Total Trihalomethanes (THMs)</td>
<td>0.080</td>
<td>Liver, kidney or central nervous system problems; increased risk of cancer</td>
<td>Byproduct of drinking water disinfection</td>
<td>n/a^7</td>
</tr>
<tr>
<td>OC Toxaphene</td>
<td>0.003</td>
<td>Kidney, liver, or thyroid problems; increased risk of cancer</td>
<td>Runoff/leaching from insecticide used on cotton and cattle</td>
<td>zero</td>
</tr>
<tr>
<td>OC 2,4,5-TP (Silvex)</td>
<td>0.05</td>
<td>Liver problems</td>
<td>Residue of banned herbicide</td>
<td>0.05</td>
</tr>
<tr>
<td>OC 1,2,4-Trichlorobenzene</td>
<td>0.07</td>
<td>Changes in adrenal glands</td>
<td>Discharge from textile finishing factories</td>
<td>0.07</td>
</tr>
<tr>
<td>OC 1,1,1-Trichloroethane</td>
<td>0.2</td>
<td>Liver, nervous system, or circulatory problems</td>
<td>Discharge from metal degreasing sites and other factories</td>
<td>0.2</td>
</tr>
<tr>
<td>OC 1,1,2-Trichloroethane</td>
<td>0.005</td>
<td>Liver, kidney, or immune system problems</td>
<td>Discharge from industrial chemical factories</td>
<td>0.003</td>
</tr>
<tr>
<td>OC Trichloroethylene</td>
<td>0.005</td>
<td>Liver problems; increased risk of cancer</td>
<td>Discharge from metal degreasing sites and other factories</td>
<td>zero</td>
</tr>
</tbody>
</table>

**LEGEND**
- **D** Disinfectant
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<tr>
<th>Contaminant</th>
<th>MCL or TT¹ (mg/L)²</th>
<th>Potential health effects from long-term³ exposure above the MCL</th>
<th>Common sources of contaminant in drinking water</th>
<th>Public Health Goal (mg/L)²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity</td>
<td>TT</td>
<td>Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (e.g., whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing microorganisms such as viruses, parasites and some bacteria. These organisms can cause short term symptoms such as nausea, cramps, diarrhea, and associated headaches.</td>
<td>Soil runoff</td>
<td>n/a</td>
</tr>
<tr>
<td>Uranium</td>
<td>30µg/L</td>
<td>Increased risk of cancer, kidney toxicity</td>
<td>Erosion of natural deposits</td>
<td>zero</td>
</tr>
<tr>
<td>Vinyl chloride</td>
<td>0.002</td>
<td>Increased risk of cancer</td>
<td>Leaching from PVC pipes; discharge from plastic factories</td>
<td>zero</td>
</tr>
<tr>
<td>Viruses (enteric)</td>
<td>TT</td>
<td>Short-term exposure: Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)</td>
<td>Human and animal fecal waste</td>
<td>zero</td>
</tr>
<tr>
<td>Xylenes (total)</td>
<td>10</td>
<td>Nervous system damage</td>
<td>Discharge from petroleum factories; discharge from chemical factories</td>
<td>10</td>
</tr>
</tbody>
</table>

LEGEND

D Disinfectant  IOC Inorganic Chemical  OC Organic Chemical
DBP Disinfection Byproduct  M Microorganism  R Radionuclides
NOTES

1 Definitions

- **Maximum Contaminant Level Goal (MCLG)**—The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.
- **Maximum Contaminant Level (MCL)**—The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.
- **Maximum Residual Disinfectant Level Goal (MRDLG)**—The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Treatment Technique (TT)**—A required process intended to reduce the level of a contaminant in drinking water.
- **HPC**: No more than 500 bacterial colonies per milliliter.

2 Units are in milligrams per liter (mg/L) unless otherwise noted. Milligrams per liter are equivalent to parts per million (ppm).

3 Health effects are from long-term exposure unless specified as short-term exposure.

4 Each water system must certify annually, in writing, to the state (using third-party or manufacturers certification) that when it uses acrylamide and/or epichlorohydrin to treat water, the combination (or product) of dose and monomer level does not exceed the levels specified, as follows: Acrylamide = 0.05 percent dosed at 1 mg/L (or equivalent); Epichlorohydrin = 0.01 percent dosed at 20 mg/L (or equivalent).

5 Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. If more than 10 percent of tap water samples exceed the action level, water systems must take additional steps. For copper, the action level is 1.3 mg/L, and for lead is 0.015 mg/L.

6 A routine sample that is fecal coliform-positive or E. coli-positive triggers repeat samples—if any repeat sample is total coliform-positive, the system has an acute MCL violation. A routine sample that is total coliform-positive and fecal coliform-negative or E. coli-negative triggers repeat samples—if any repeat sample is fecal coliform-positive or E. coli-positive, the system has an acute MCL violation. See also Total Coliforms.

7 EPA’s surface water treatment rules require systems using surface water or ground water under the direct influence of surface water to (1) disinfect their water, and (2) filter their water or meet criteria for avoiding filtration so that the following contaminants are controlled at the following levels:
   - **Cryptosporidium**: 99 percent removal for systems that filter. Unfiltered systems are required to include Cryptosporidium in their existing watershed control provisions.
   - **Giardia lamblia**: 99.9 percent removal/inactivation
   - **Viruses**: 99.99 percent removal/inactivation
   - **Legionella**: No limit, but EPA believes that if Giardia and viruses are removed/inactivated according to the treatment techniques in the surface water treatment rule, Legionella will also be controlled.
   - **Turbidity**: For systems that use conventional or direct filtration, at no time can turbidity (cloudiness of water) go higher than 1 nephelometric turbidity unit (NTU), and samples for turbidity must be less than or equal to 0.3 NTU in at least 95 percent of the samples in any month. Systems that use filtration other than conventional or direct filtration must follow state limits, which must include turbidity at no time exceeding 5 NTU.
   - **HPC**: No more than 500 bacterial colonies per milliliter.
   - **Long Term 1 Enhanced Surface Water Treatment**: Surface water systems or ground water systems under the direct influence of surface water serving fewer than 10,000 people must comply with the applicable Long Term 1 Enhanced Surface Water Treatment Rule provisions (e.g. turbidity standards, individual filter monitoring, Cryptosporidium removal requirements, updated watershed control requirements for unfiltered systems).
   - **Long Term 2 Enhanced Surface Water Treatment**: This rule applies to all surface water systems or ground water systems under the direct influence of surface water. The rule targets additional Cryptosporidium treatment requirements for higher risk systems and includes provisions to reduce risks from uncovered finished water storages facilities and to ensure that the systems maintain microbial protection as they take steps to reduce the formation of disinfection byproducts. (Monitoring start dates are staggered by system size. The largest systems (serving at least 100,000 people) will begin monitoring in October 2006 and the smallest systems (serving fewer than 10,000 people) will not begin monitoring until October 2008. After completing monitoring and determining their treatment bin, systems generally have three years to comply with any additional treatment requirements.)
   - **Filter Backwash Recycling**: The Filter Backwash Recycling Rule requires systems that recycle to return specific recycle flows through all processes of the system’s existing conventional or direct filtration system or at an alternate location approved by the state.
   - **No more than 5.0 percent samples total coliform-positive in a month.** (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive per month.) Every sample that has total coliform must be analyzed for either fecal coliforms or E. coli. If two consecutive TC-positive samples, and one is also positive for E. coli or fecal coliforms, system has an acute MCL violation.
   - **Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants:**
     - **Haloacetic acids**: dichloroacetic acid (zero); trichloroacetic acid (0.3 mg/L)
     - **Trihalomethanes**: bromodichloromethane (zero); bromoform (zero); dibromochloromethane (0.06 mg/L)
National Secondary Drinking Water Regulation

National Secondary Drinking Water Regulations are non-enforceable guidelines regarding contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. However, some states may choose to adopt them as enforceable standards.

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Secondary Maximum Contaminant Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>0.05 to 0.2 mg/L</td>
</tr>
<tr>
<td>Chloride</td>
<td>250 mg/L</td>
</tr>
<tr>
<td>Color</td>
<td>15 (color units)</td>
</tr>
<tr>
<td>Copper</td>
<td>1.0 mg/L</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>noncorrosive</td>
</tr>
<tr>
<td>Fluoride</td>
<td>2.0 mg/L</td>
</tr>
<tr>
<td>Foaming Agents</td>
<td>0.5 mg/L</td>
</tr>
<tr>
<td>Iron</td>
<td>0.3 mg/L</td>
</tr>
<tr>
<td>Manganese</td>
<td>0.05 mg/L</td>
</tr>
<tr>
<td>Odor</td>
<td>3 threshold odor number</td>
</tr>
<tr>
<td>pH</td>
<td>6.5-8.5</td>
</tr>
<tr>
<td>Silver</td>
<td>0.10 mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>250 mg/L</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>500 mg/L</td>
</tr>
<tr>
<td>Zinc</td>
<td>5 mg/L</td>
</tr>
</tbody>
</table>

For More Information

EPA’s Safe Drinking Water Web site: http://www.epa.gov/safewater/

EPA’s Safe Drinking Water Hotline: (800) 426-4791

To order additional posters or other ground water and drinking water publications, please contact the National Service Center for Environmental Publications at : (800) 490-9198, or email: nscep@bps-lmit.com.
Appendix D

City of Buffalo

Water Quality Characteristics

and Annual Report
Buffalo Water Treatment Plant  
8875 U.S. HWY. 16 West  
Buffalo, Wy. 82834  
(307) 684-0572

Our Water Characteristics

Raw Water

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph</td>
<td>7.3 - 9.0</td>
</tr>
<tr>
<td>Alkalinity</td>
<td>18 - 32 mg/L</td>
</tr>
<tr>
<td>Hardness</td>
<td>20 - 30 mg/L</td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>13 - 18 mg/L</td>
</tr>
<tr>
<td>Turbidity</td>
<td>0.4 winter - 20.0 spring run off - 2.0 average NTU's</td>
</tr>
<tr>
<td>Temp.</td>
<td>0 - 20 degrees C, 32 - 68 degrees F, Seasonal</td>
</tr>
<tr>
<td>Color</td>
<td>0.0 - 70.0</td>
</tr>
</tbody>
</table>

Finished Water

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH</td>
<td>6.7 - 7.3</td>
</tr>
<tr>
<td>Alkalinity</td>
<td>24 - 34 mg/L</td>
</tr>
<tr>
<td>Conductivity</td>
<td>30 - 50 uS/cm</td>
</tr>
<tr>
<td>Hardness</td>
<td>20 - 30 mg/L or 1.2 - 1.8 grains per gallon. (17.1 mg/L per grain)</td>
</tr>
<tr>
<td>Turbidity</td>
<td>0.03 - 0.09 NTU's 95% of the year</td>
</tr>
<tr>
<td>Color</td>
<td>0.0, 95% of the time. 2.0 to 10.0, blooms or pond turn overs</td>
</tr>
<tr>
<td>Fluoride</td>
<td>0.0 to 0.08 mg/L. none added.</td>
</tr>
<tr>
<td>Sodium</td>
<td>0.0 to 9.0 mg/L</td>
</tr>
</tbody>
</table>

Coagulant – Aluminum Chloride Hydroxide blend (Nalco ultrion 8185)  
1 – 15 mg/L dose

Corrosion Control - Blended Polyphosphate. 1.0 mg/L dose

Disinfectant – Chlorine Gas, 2.0 mg/L dose, to maintain 1.0 mg/L residual in distribution system.

Slight taste and odor problem during seasonal algae blooms, none otherwise.

1 mg/L = 1 ppm (parts per million) 1 ppm is equivalent to 1 inch in 16 miles or 1 cent in $10,000. or 1 minute in 2 years.
Annual Drinking Water Quality Report
The Water We Drink
City of Buffalo Water Treatment Plant
2009

We’re very pleased to provide you with this year’s Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. This report shows our water quality and what it means.

If you have any questions about this report or concerning your water utility, please contact Burt Allgood, Ronnie Young or Travis Green at the Buffalo Water Treatment Plant (307) 684 - 0572.

Buffalo Water Treatment Plant
8875 U.S. HWY. 16 West
Buffalo, WY. 82834
Phone (307) 684 - 0572
Fax (307) 684 - 0573

The Buffalo Water Treatment Plant treats surface water from Clear Creek.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination.

If you are interested in opportunities to be involved with decision affecting your drinking water, please contact any of the individuals listed above or attend the Buffalo City Council meetings which are held on the first and third Tuesday of each month.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
**Maximum Contaminant Level Goal (MCLG)** - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

### TEST RESULTS

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Y/N</th>
<th>Level Detected</th>
<th>Unit Measurement</th>
<th>MCLG or MRDLG</th>
<th>MCL or MRDL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Microbiological Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Total Coliform Bacteria</td>
<td>N</td>
<td>none</td>
<td>0</td>
<td>presence of coliform bacteria in 5% of monthly samples</td>
<td>Naturally present in the environment</td>
<td></td>
</tr>
<tr>
<td>2. Fecal coliform and E.coli</td>
<td>N</td>
<td>none</td>
<td>0</td>
<td>a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive</td>
<td>Human and animal fecal waste</td>
<td></td>
</tr>
<tr>
<td>3. Turbidity</td>
<td>N</td>
<td>.080</td>
<td>n/a</td>
<td>1T</td>
<td>Soil runoff</td>
<td></td>
</tr>
<tr>
<td><strong>Inorganic Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Copper</td>
<td>N</td>
<td>.20 ppm</td>
<td>0</td>
<td>1.3</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
<td></td>
</tr>
<tr>
<td>18. Lead Did Not Meet 90th percentile</td>
<td>N</td>
<td>.35 ppm</td>
<td>0</td>
<td>.015</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits</td>
<td></td>
</tr>
<tr>
<td>20. Nitrate (as Nitrogen)</td>
<td>N</td>
<td>0.2 ppm</td>
<td>0</td>
<td>10</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td>
<td></td>
</tr>
<tr>
<td><strong>Volatile Organic Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [Name of PWS] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead

Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline at 1-800-426-4791.

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
**Total Coliform**: The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

**Nitrates**: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Lead**: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office if you have questions.

We at Buffalo Water Plant work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.
Appendix E

City of Buffalo

Water Treatment Plant Water Volumes
CITY OF BUFFALO WATER TREATMENT PLANT

Water usage report from the water treatment plant, 2009

EFFLUENT FLOW

Total Gallons Effluent = 353,600,000 MG = 969,000 average gallons/day
Per capital usage annually = 221 gal/day/ consumer
Maximum daily flow = 1,800,000 MG (July 09)

Not sure what else your looking for. Let me know if you need anything more.

RONNIE
## Monthly Water Total Volume 2009
### City of Buffalo Water Treatment Plant

<table>
<thead>
<tr>
<th>Month</th>
<th>Influent Total (gallons)</th>
<th>Influent Average Day (gallons)</th>
<th>Effluent Total (gallons)</th>
<th>Effluent Average Day (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>25,748,000</td>
<td>831,000</td>
<td>22,577,000</td>
<td>728,000</td>
</tr>
<tr>
<td>February</td>
<td>22,124,000</td>
<td>790,000</td>
<td>18,538,000</td>
<td>662,000</td>
</tr>
<tr>
<td>March</td>
<td>23,922,000</td>
<td>772,000</td>
<td>19,929,000</td>
<td>643,000</td>
</tr>
<tr>
<td>April</td>
<td>ND</td>
<td>ND</td>
<td>16,756,000</td>
<td>559,000</td>
</tr>
<tr>
<td>May</td>
<td>31,000,000</td>
<td>1,000,000</td>
<td>32,700,000</td>
<td>1,100,000</td>
</tr>
<tr>
<td>June</td>
<td>37,500,000</td>
<td>1,250,000</td>
<td>37,245,000</td>
<td>1,242,000</td>
</tr>
<tr>
<td>July</td>
<td>57,300,000</td>
<td>1,848,000</td>
<td>55,938,000</td>
<td>1,804,000</td>
</tr>
<tr>
<td>August</td>
<td>57,366,000</td>
<td>1,851,000</td>
<td>49,972,000</td>
<td>1,612,000</td>
</tr>
<tr>
<td>September</td>
<td>52,258,000</td>
<td>1,742,000</td>
<td>46,300,000</td>
<td>1,544,000</td>
</tr>
<tr>
<td>October</td>
<td>14,743,000</td>
<td>475,600</td>
<td>17,688,000</td>
<td>570,600</td>
</tr>
<tr>
<td>November</td>
<td>17,335,000</td>
<td>578,000</td>
<td>16,577,000</td>
<td>552,600</td>
</tr>
<tr>
<td>December</td>
<td>31,087,000</td>
<td>1,002,000</td>
<td>19,381,000</td>
<td>625,100</td>
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</table>

ND = No Data
## BUFFALO WATER TREATMENT PLANT
### PHYSICAL METER CHECK

<table>
<thead>
<tr>
<th>MONTH</th>
<th>July 09</th>
</tr>
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<table>
<thead>
<tr>
<th>DATE</th>
<th>EFFL. WEST</th>
<th>EFFL. EAST</th>
<th>TOTAL BOTH</th>
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<tbody>
<tr>
<td>1</td>
<td>135739</td>
<td>1308000</td>
<td>165942</td>
</tr>
<tr>
<td>2</td>
<td>136722</td>
<td>16033000</td>
<td>616495</td>
</tr>
<tr>
<td>3</td>
<td>138057</td>
<td>1285000</td>
<td>671879</td>
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<td>4</td>
<td>138750</td>
<td>1430000</td>
<td>67562</td>
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<td>5</td>
<td>139488</td>
<td>1380000</td>
<td>67971</td>
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<td>6</td>
<td>140241</td>
<td>753000</td>
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<td>141559</td>
<td>1318000</td>
<td>69072</td>
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<td>8</td>
<td>142581</td>
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<td>69615</td>
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<td>9</td>
<td>143850</td>
<td>1269000</td>
<td>70306</td>
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<tr>
<td>10</td>
<td>144933</td>
<td>1138300</td>
<td>70880</td>
</tr>
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<td>11</td>
<td>146330</td>
<td>1397000</td>
<td>71618</td>
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<tr>
<td>12</td>
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<td>13</td>
<td>148680</td>
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<td>72990</td>
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<td>73692</td>
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<td>15</td>
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<td>1273000</td>
<td>74223</td>
</tr>
<tr>
<td>16</td>
<td>152447</td>
<td>1272000</td>
<td>74905</td>
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<tr>
<td>17</td>
<td>153969</td>
<td>1522000</td>
<td>75727</td>
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<tr>
<td>18</td>
<td>155398</td>
<td>1429000</td>
<td>76507</td>
</tr>
<tr>
<td>19</td>
<td>156832</td>
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<td>77286</td>
</tr>
<tr>
<td>20</td>
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<td>21</td>
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<td>78298</td>
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<td>1609165</td>
<td>1044000</td>
<td>78799</td>
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<tr>
<td>23</td>
<td>162175</td>
<td>1210000</td>
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<td>24</td>
<td>163518</td>
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<td>80178</td>
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<td>25</td>
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<td>80991</td>
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<td>26</td>
<td>166201</td>
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<td>81621</td>
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<td>167747</td>
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<td>82445</td>
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<tr>
<td>30</td>
<td>170750</td>
<td>832000</td>
<td>83612</td>
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<tr>
<td>31</td>
<td>171850</td>
<td>1056000</td>
<td>84180</td>
</tr>
</tbody>
</table>
Appendix F

City of Buffalo

Fire Flow Data
<table>
<thead>
<tr>
<th>Date</th>
<th>Address</th>
<th>Static Pressure</th>
<th>Residual Pressure</th>
<th>GPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. Main {Deerfield}</td>
<td>60 psi</td>
<td>60 psi</td>
<td></td>
<td>835</td>
</tr>
<tr>
<td>N. Main {Chamber of Commerce}</td>
<td>55 psi</td>
<td>50 psi</td>
<td></td>
<td>835</td>
</tr>
<tr>
<td>N. Main {Reimann Oil}</td>
<td>64 psi</td>
<td>55 psi</td>
<td></td>
<td>938</td>
</tr>
<tr>
<td>Williams &amp; Gatchell</td>
<td>65 psi</td>
<td>56 psi</td>
<td></td>
<td>775</td>
</tr>
<tr>
<td>S. Main &amp; Parmalee</td>
<td>44 psi</td>
<td>38 psi</td>
<td></td>
<td>906</td>
</tr>
<tr>
<td>Lobb &amp; Parmalee</td>
<td>48 psi</td>
<td>44 psi</td>
<td></td>
<td>756</td>
</tr>
<tr>
<td>Thorn &amp; Wyoming</td>
<td>48 psi</td>
<td>42 psi</td>
<td></td>
<td>756</td>
</tr>
<tr>
<td>Thorn &amp; Cummings</td>
<td>58 psi</td>
<td>50 psi</td>
<td></td>
<td>797</td>
</tr>
<tr>
<td>Main &amp; Bennett</td>
<td>48 psi</td>
<td>42 psi</td>
<td></td>
<td>871</td>
</tr>
<tr>
<td>Bennett {Congregational Church}</td>
<td>80 psi</td>
<td>56 psi</td>
<td></td>
<td>756</td>
</tr>
<tr>
<td>Bennett &amp; Wyoming</td>
<td>60 psi</td>
<td>36 psi</td>
<td></td>
<td>797</td>
</tr>
<tr>
<td>Bennett &amp; Tisdale</td>
<td>70 psi</td>
<td>40 psi</td>
<td></td>
<td>711</td>
</tr>
<tr>
<td>Bennett &amp; Cummings</td>
<td>60 psi</td>
<td>40 psi</td>
<td></td>
<td>711</td>
</tr>
<tr>
<td>Reno Road &amp; Hamilton</td>
<td>60 psi</td>
<td>36 psi</td>
<td></td>
<td>711</td>
</tr>
<tr>
<td>Tisdale &amp; Hamilton</td>
<td>60 psi</td>
<td>36 psi</td>
<td></td>
<td>711</td>
</tr>
<tr>
<td>Fetterman &amp; Cummings</td>
<td>48 psi</td>
<td>24 psi</td>
<td></td>
<td>608</td>
</tr>
<tr>
<td>Wyoming &amp; Benteen</td>
<td>60 psi</td>
<td>48 psi</td>
<td></td>
<td>756</td>
</tr>
<tr>
<td>Tisdale &amp; Benteen</td>
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Appendix G

City of Buffalo

WaterCAD Model Peak Day Demand

Junction and Pipe Data
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J-87
J-89
J-90

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4,700.00

X
(ft)
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Y
(ft)
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-565.66
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-2,777.85
-2777.85
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-2,857.04
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-2,108.06
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-266.97
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Demand
(gpm)
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2.3
2.2
0
2.2
13.2
8.6
3.9
3.4
2.8
5.6
5
5
3.4
0
5
2.8
0
6.1
5
4.5
7.8
0
2.4
3.5
1.1
1.4
3.7
3.1
24.4
0.5
2.2
0
0.1
3.1
2.3
2.8
2.3
1.4
1.5
0
1
2.9
1.3
3.8
9.6
0
6.2
2.2

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4,791.80

Pressure
(psi)
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79.4
85.9
73
79
101
60.1
64.6
69.7
88.8
97.9
108.2
96.1
86.1
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98
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48
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37.6
39.8


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1.4
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95.8


## City of Buffalo Junction Data

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# City of Buffalo Pipe Data

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Appendix H

Typical Schematics of Major Waterline Components
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GENERAL NOTES:
1. FOR TANK DIMENSIONAL VALUES SEE "WATER & TREATMENT TANK GENERAL DIMENSIONS" DRAWING NO. 261375.
2. FOR FOUNDATION CONFIGURATIONS AND CORRESPONDING CONSTRUCTION MATERIAL REQUIREMENTS REFER TO THE PROJECT SUBMITTAL DOCUMENTATION.
GRAY & BENTONITE SEAL STRIP. APPLY AS OUTLINED IN THE BUILDERS GUIDE.

FLOOR REBAR

AROUND ENTIRE PERIMETER OF PIPE PENETRATION 18"

FOOTING I.D.

PIPE MUST HAVE WATER STOP BY PIPE SUPPLIER

PIPE PENETRATION (SUPPLIED BY BUILDER)

FOUNDATION O.D.

3'-0" MINIMUM

12" CONCRETE DEPTH

3" CRUSHED ROCK BACKFILL

FOR FOUNDATION CONCRETE REINFORCEMENT STEEL REFER TO THE PROJECT SUBMITTAL DOCUMENTATION.
24" DOOR: (1) 1/2" X 2" LONG HHCS, (1) 1/2" NUT, AND (1) SPECIAL HEX WASHER.
30" DOOR: (1) 1/2" X 2-1/4" LONG HHCS, (1) 1/2" NUT, AND (1) SPECIAL HEX WASHER.
24" DOOR: (30) 1/2" X 1-3/4" LONG HHCS, (1) 1/2" NUT, AND (1) 1/2" WASHER.
30" DOOR: (36) 1/2" X 2" LONG HHCS, (1) 1/2" NUT, AND (1) 1/2" WASHER.

Apply never seize or equivalent.

Apply a continuous bead of sealer around each of the indicated bolt hole patterns.
Sealer is also placed on the inner surface of the access door sheet when the inner reinforcing plate is required.

Ream to 1/2" dia. per dwg. 274723.

Inner reinforcing plate plate usage is based on project requirements.

Round access door sheet.

NOTE:
Chamfer the reamed holes on the tank interior as necessary to allow the bolt heads to seat properly.
Sealer is applied to the components only after the reaming procedures have been completed and the components are ready for final assembly.
See drawing number 261337 for the neck weldment to access door sheet bolt joint.
GENERAL NOTES:
1. DRAWING IS NOT TO SCALE.
2. FOUNDATION AND FLOOR DESIGNS ARE PRELIMINARY AND CONCEPTUALLY REPRESENTED AS SALES DRAWINGS AND BASED ON: AWWA D103-97 SECTION 11.4.1.6 & 100 MPH WIND.
3. FOR SPECIFIC FLOOR AND FOUNDATION CALCULATIONS PLEASE REFER TO THE PROJECT SUBMITTAL DOCUMENTATION.
4. VARIABLES TO THESE FOUNDATION AND FLOOR DESIGNS INCLUDE, BUT ARE NOT LIMITED TO: TANK HEIGHT, SOIL STRENGTH, SEASONAL WATER TABLE, FROST DEPTH, SEISMIC ZONE, WIND SPEED DESIGN, TANK DESIGN, 28-DAY CONCRETE COMPRESSIVE STRENGTH, STEEL REINFORCEMENT STRENGTH AND SPECIFIC GRAVITY OF THE LIQUID.
5. THE VARIABLES LISTED ABOVE WILL DETERMINE THE SPECIFIC FLOOR THICKNESS, FOOTING WIDTH AND DEPTH AND THE AMOUNT OF REINFORCING REQUIRED.

- CURB CIRCUMFERENTIAL REBAR
  - (2) BUNDLED BARS
  - * ANCHOR RODS 1/2" DIA.
  - (2) PER SHEET
- FLOOR CIRCUMFERENTIAL REBAR
  - (2) RINGS
- FLOOR MAT REBAR
- GRAVEL BACKFILL
- UNDISTURBED EARTH

* THESE ITEMS TO BE SUPPLIED BY THE TANK MANUFACTURER.
Appendix I

WWDC

Operating Criteria
OPERATING CRITERIA

OF THE

WYOMING WATER DEVELOPMENT PROGRAM

APPROVED BY:
WYOMING WATER DEVELOPMENT COMMISSION
LEGISLATIVE SELECT WATER COMMITTEE
JUNE 5, 2008
OPERATING CRITERIA OF THE
WYOMING WATER DEVELOPMENT PROGRAM

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CHAPTER I. Introduction

A. Purpose of the Operating Criteria

The Wyoming Water Development Commission (WWDC), comprised of ten (10) public members appointed by the Governor, has authority over the Wyoming Water Development Program. The Wyoming Water Development Office (WWDO) administers the program.

The 1975 Legislature passed W.S. 41-2-112(a), which established the purpose of the program:

"The Wyoming water development program is established to foster, promote and encourage the optimal development of the state's human, industrial, mineral, agricultural, water and recreational resources. The program shall provide, through the commission, procedures and policies for the planning, selection, financing, construction, acquisition and operation of projects and facilities for the conservation, storage, distribution and use of water, necessary in the public interest to develop and preserve Wyoming's water and related land resources. The program shall encourage development of water facilities for irrigation, for reduction of flood damage, for abatement of pollution, for preservation and development of fish and wildlife resources [and] for protection and improvement of public lands and shall help make available the waters of this state for all beneficial uses, including but not limited to municipal, domestic, agricultural, industrial, instream flows, hydroelectric power and recreational purposes, conservation of land resources and protection of the health, safety and general welfare of the people of the state of Wyoming."

These criteria provide the WWDC, the WWDO and the public with general standards for evaluating and prioritizing applications for program funding, a general framework for the development of program/project recommendations and the generation of water related information.

In addition, these criteria have been developed to assist the WWDC and WWDO to establish priorities and procedures and to serve as a tool to coordinate with other state and federal programs, which provide funding assistance for water projects. The criteria are not intended to be inflexible or uncompromising rules but rather to provide general guidelines for use in the decision making process.
These criteria respond to the requirements of W.S. 41-2-112(a) that the WWDC adopt procedures and policies and W.S. 41-2-121(b) which requires the WWDC to establish criteria for evaluation and administration of water development programs. The statutes also provide specific program guidance and were considered in the development of these criteria.

B. Changes in the Program Criteria

The criteria may be revised on a periodic basis to insure the Water Development Program is serving Wyoming citizens in a responsible and efficient manner. The WWDC and Director of the WWDO may offer changes in the criteria. Proposed changes in the criteria shall be reviewed during the combined Select Water Committee/WWDC meeting in August. During the August meeting, the proposed changes in criteria may be given a preliminary approval or final disapproval. Those proposed changes that are preliminarily approved shall be reviewed by the public during a public hearing process.

The proposed changes which receive preliminary approval and which have been reviewed by the public shall be considered for final approval during the WWDC's May/June meeting. The WWDC shall also weigh the comments provided by the public to determine whether a proposed change shall be accepted as written, amended or disapproved.

C. Program Statutes

The following statutes are the primary basis for these criteria:

W.S. 41-2-112(b) states:

"In developing financing recommendations under the Wyoming water development program, the commission shall:

(i) Emphasize multipurpose water projects for maximum benefits and cost allocation;

(ii) Identify project costs and benefits;

(iii) Recommend an allocation of project costs, including expenditures of state funds for Level I reconnaissance studies, Level II feasibility studies and Level III development plans, to be reimbursed by project beneficiaries and to be borne by the state;

(iv) Recommend terms and conditions of financing project costs, maintenance and operation, based on the benefits to be derived by project beneficiaries and their respective ability to pay;"
(v) Consider all funds, assets and revenue sources of all project beneficiaries and recommend financing plans which will reimburse expenditures of state funds, except as such expenditures may be allocated to a state benefit, including enhancement of fish and wildlife habitat or recreation;

(vi) Consider state construction and ownership of any project which requires the state to finance un-reimbursed costs in excess of ten percent (10%) of the total project cost and submit recommendations on project costs and potential revenues from sale of water or power from the project;

(vii) Consider any other factors necessary to develop comprehensive financing recommendations."

W.S. 41-2-121 provides more specific guidance:

"(a) The water development commission shall establish criteria for evaluation and administration of water development projects. Criteria shall include but not be limited to the following:

(i) All water development proposals submitted to the legislature shall be reviewed by and accompanied by the recommendation of the water development commission;

(ii) The commission's recommendation shall:

(A) Emphasize projects developing un-appropriated water;

(B) Give preference wherever possible to projects developing new storage capacity;

(C) Consider the potential for development of hydroelectric power in any project through Level II;

(D) Include a summary of the commission's findings under W.S. 41-2-112(b);

(E) Include financing methods subject to the following:

(I) Any water development project may be financed by grants not to exceed seventy-five percent (75%) of the total cost of the project;
(II) Storage projects may be financed by grants for the full cost of the storage capacity but not to exceed public benefits as computed by the commission;

(III) Loans may be made for domestic, agricultural, industrial, recreational or fish and wildlife enhancement purposes;

(IV) The term of a loan shall not exceed fifty years after substantial completion of the project;

(V) Payment of interest and principal on loans may be deferred for not more than five (5) years after substantial completion of the project;

(VI) Loan contracts for project construction shall include provisions to ensure the project shall be operated and maintained during the term of the loan;

(VII) The state may elect to own all or a part of a project and enter into water service repayment contracts with project developers;

(VIII) A project involving a trans-basin diversion shall address the impact of the diversion and recommend measures to mitigate any adverse impact identified in the basin of origin;

(IX) Interest on a loan should provide a reasonable return to the state but shall not be less than four percent (4%) except when the commission recommends a lower interest rate because of public benefits;

(X) Loan contracts for project construction should provide for payment of interest on defaulted payments at a rate of ten percent (10%) per annum;

(iii) Repealed by Laws 1986, Chapter 109, Section 3.

(iv) The commission may disqualify from consideration or give lower priority to a project proposed to correct problems identified in a review performed by the department of environmental quality under W.S. 18-5-306(c) where the board of county commissioners
approved a subdivision application notwithstanding the department’s recommendation that the application be disapproved."

D. Program Philosophy

The Wyoming Water Development Program was founded on the philosophy of utilizing a portion of the financial resources the state receives from the development and use of its non-renewable resources, such as coal, oil, and gas, to develop a renewable resource, water. The program provides long-term economic benefits to the State of Wyoming by providing information and water supply projects for the existing and future needs of the State of Wyoming and its citizens. Water availability is a key ingredient for the development of a stable Wyoming economy. The projects also provide short-term economic benefits to the State of Wyoming in the form of jobs and increased material and equipment sales.

Interstate compacts and water related court decrees serve as the primary defense of Wyoming’s water entitlements. However, demands downstream of Wyoming are increasing at alarming rates, as are the number of lawsuits, which may interpret the intent of those compacts and decrees. There is resistance from downstream states toward upstream development. Federal laws, rules and regulations are narrowing the window of opportunity to develop water resources. However, water development plans can serve to protect Wyoming’s entitlements by documenting the need to develop additional sources of water to meet demands associated with anticipated growth and development. The program’s criteria are based on the general philosophy that responsible development and the efficient consumptive beneficial use of water will protect Wyoming’s compact and court decreed entitlements.
CHAPTER II. Project Development

A. New Development Program

The New Development Program develops presently unused and/or unappropriated waters of Wyoming. The program is funded by Water Development Account No. 1 [W.S. 41-2-124(a)(i)], which has received general fund appropriations and budget reserve account appropriations on occasion, as approved by the legislature; the interest earnings that have accrued to Water Development Account No. 1; and a percentage (12.45%) of the revenues which accrue to the state’s severance tax distribution account. Legislative approval must be granted prior to allocating funds to a particular purpose or project.

The New Development Program provides an opportunity for sponsors to develop water supplies for anticipated future needs to insure that lack of water supply will not inhibit economic growth. The program encourages water development through state/local partnerships. The sponsor can complete a water supply project with state funding assistance. If a project is developed to meet the needs of the sponsor alone, the sponsor owns the project and its revenues. However, if there is an opportunity to sell water for other purposes, the sponsor and state share in the revenues from the sale in proportion to the grant/loan mix. This partnership is discussed in further detail in subsection D.3.g of Chapter III of these criteria.

In as much as the efficient consumptive use of Wyoming's water resources provides the best assurance that Wyoming's water will remain available for the future, the need for water shall be a key consideration in prioritizing projects and dedicating resources for water development purposes. Projects can be placed in the following five categories on the basis of need:

1. Projects developing water for present and future needs of the project sponsors.

These projects can be pursued through the study and the preliminary design phases if the project sponsor has a legitimate need for the water and has a desire to pursue the project. These projects can be constructed if the sponsor has the ability and willingness to pay a portion of the development costs and all of the operation, maintenance and replacement costs. All projects should be designed to accommodate anticipated future demands of the sponsor during the life of the project. Population projections and other related tools should be used to define realistic future needs of the sponsor.
2. Projects that could be expanded for purposes and needs beyond those of the project sponsor.

If there is the opportunity on a particular project to expand its scope to address water supply needs and problems beyond those of the project sponsor, the WWDC shall consider the expansion of the project to address those additional needs and problems on a case-by-case basis. Input from local governments will be considered in these deliberations.

3. Projects capable of developing water for secondary benefits

If there is the opportunity on a particular project to develop water in excess of present and future needs of the sponsor in order to provide secondary benefits, the WWDC shall consider development of the additional supply on a case-by-case basis.

The key factors shall be the availability of water to promote secondary benefits such as flood control, hydropower, recreation and environmental enhancement. Projects in this category may proceed as a sponsored project with the state providing the funds to promote the secondary benefits.

4. Projects developing water for which there is not a presently defined purpose.

Federal regulations make developing water for future, undefined uses difficult. However, opportunities on a particular project to develop water in addition to that needed for present, future, expanded, and secondary purposes should not be summarily dismissed. These opportunities should be identified and considered for future enlargements to the project or pursued if possible and if the development of the water may provide economic benefits in the future. Projects in this category may proceed as sponsored projects with the state providing the funds for the development of the additional water and receiving the revenues generated by future sales of the additional water.

5. Projects which may prove feasible in the future.

One of the primary purposes of river basin plans is to identify water development opportunities as well as define water supply shortages. The plans serve to promote interest from water users who may become interested in a particular project and become project sponsors.
B. Rehabilitation Program

The purpose of the Rehabilitation Program is to provide funding assistance for the improvement of water projects completed and in use for at least fifteen (15) years. The source of revenue for the program is Water Development Account No. II [W.S. 41-2-124(a)(ii)], which receives a percentage (2.10%) of the revenues that accrue to the state’s severance tax distribution account and the interest earnings that have accrued to Water Development Account No. II. Legislative approval must be granted prior to allocating funds to a particular purpose or project.

Rehabilitation projects are typically initiated by an application from a project sponsor. If the application is approved, the project is usually assigned a Level II status and can proceed through construction if it is determined the project is technically and economically feasible. The project sponsor must be willing and capable of financially supporting a portion of the project development costs plus all operation and maintenance costs.

The Rehabilitation Program serves to assist project sponsors in keeping existing water supplies effective and viable, thereby preserving their use for the future. Rehabilitation projects can improve an existing municipal or rural domestic water supply system or an agricultural storage facility or conveyance system. The projects serve to insure dam safety, decrease operation, maintenance, and replacement costs and/or provide a more efficient means of using existing water supplies.

C. Dam and Reservoir Program

Proposed new dams with storage capacity of 2,000 acre feet or more and proposed expansions of existing dams of 1,000 acre feet or more qualify for the Dam and Reservoir Program. The source of revenue for the program is Water Development Account No. III [W.S. 41-2-124(a)(iii)], which has received Water Development Account No. I appropriations and budget reserve account appropriations on occasion, as approved by the legislature; the interest earnings that have accrued to the Water Development Account No. III; and a percentage (0.5%) of the revenues which accrue to the state’s severance tax distribution account. Legislative approval must be granted prior to allocating funds to a particular purpose or project.

Dams and reservoirs typically provide opportunities for many potential uses. While water supply shall be emphasized in the development of reservoir operating plans, recreation, environmental enhancement, flood control, erosion control and hydropower uses should be explored as secondary purposes.
D. **Priorities of Projects**

As previously discussed, the statutory guidelines are sufficiently broad to allow the program to address all types of projects involving water. However, in order to establish priorities and to utilize available program funds effectively and efficiently, it is necessary to develop priorities relative to the types of water projects the program should pursue. The following is a list of eligible projects in order of preference:

1. **Multipurpose Projects** -- For purposes of program implementation, multipurpose projects are hereby defined as projects which serve two or more of the following functions: agriculture, municipal, industrial, rural domestic, recreation, environmental, flood control, erosion control, and hydropower. Priority will be given to those projects that may practically serve more than one entity or purpose and whose service area encompasses a larger, more regional area.

2. **Storage Projects** -- Dams and reservoirs that store water during times of surplus for use later when needed shall be a program priority. Dams and reservoirs can also serve to re-regulate existing water supplies to meet the demands of the water users in a more efficient and effective manner. Proposed new dams with storage capacity of 2,000 acre feet or more and proposed expansions of existing dams of 1,000 acre feet or more qualify for the Dam and Reservoir Program. Smaller storage projects qualify for funding under the New Development Program. Repairs and improvements to existing storage projects qualify for funding under the Rehabilitation Program.

3. **Supply Projects** -- These projects include groundwater wells, alluvial wells, diversion dams, and other structures, which put unappropriated water to beneficial use or supply existing uses.

The priority for supply projects based on purpose are as follows:

**Priority 1.** Irrigation and municipal projects

**Priority 2.** Rural domestic projects that are obtaining water from another existing public water supply

**Priority 3.** Rural domestic projects with independent water supplies and raw water irrigation projects for municipalities and rural domestic districts
4. Supply Systems -- While the above three types of projects make water available at the source, supply systems bring this source water closer to the point of use through pipeline and canal systems. Projects in this category include major water transmission facilities that deliver water to distribution systems that serve individual users or to water treatment facilities. Typically, the transmission systems transport raw/untreated water. However, if the most efficient/economical project configuration dictates the water should be treated prior to transportation, the transmission systems can serve to deliver treated water.

The priority for supply systems based on purpose are as follows:

Priority 1. Irrigation and municipal projects

Priority 2. Rural domestic projects that are obtaining water from another existing public water supply system

Priority 3. Rural domestic projects with independent water supply systems and raw water irrigation systems for municipalities and rural domestic districts

Water treatment facilities are not included in this category and are not eligible for funding with one exception: Disinfection facilities needed to connect groundwater wells to a supply system are eligible for program funding when it expedites the completion of the project.

Distribution systems are not included in this category and are not eligible for funding. It is often difficult to determine when pipelines are serving as supply systems or distribution systems. The primary purpose of supply systems is to transport or deliver water from one point to another for later distribution to customers. The primary purpose of distribution systems is to deliver water to individual users. The determination as to which pipelines serve as supply systems and thereby qualify for program funding will be completed during the Level II process.

5. Hydropower Projects -- These projects include retrofitting existing facilities or the construction of new facilities capable of developing marketable hydropower. W.S. 41-2-121 directs the consideration of hydropower production on any program project through the feasibility phase. However, these types of projects shall not be subsidized with grants. The potential return of the investment is the key consideration in determining whether to pursue hydropower projects.
6. Purchase of Existing Storage -- This type of investment may be made under the program if the storage is uncommitted or is not being used for a specific purpose. Any such purchase shall be project specific. There should be assurances that the investment will lead to the ultimate use of the water. The potential market for the water shall be the key consideration in determining whether the purchase should be pursued. Potential secondary benefits such as recreational or environmental uses shall also be considered.

7. Recreation -- The development of water projects the primary purpose of which is to enhance recreation may be implemented under this program. In addition, the feasibility of providing recreation benefits shall be considered in the operating plan of all new projects.

8. Drinking Water State Revolving Fund -- By enacting W.S. 16-1-302, the Legislature authorized the use of water development account funds to provide 50% of the state’s matching fund requirements for the federal Drinking Water State Revolving Loan Fund (DWSRF) program. The DWSRF program may be used to fund improvements to water treatment systems and to finance measures that address other Safe Drinking Water Act compliance issues. This program is not included in the annual Omnibus Water Bill considered by the Legislature. Water Development Program funds are appropriated automatically by statute to match 10% of the federal capitalization grant.

9. Reimbursement of Temporary or Emergency Funding

The WWDC may recommend that the legislature reimburse or provide refinancing for projects in which the project sponsors acquired temporary or emergency funding from the State Land and Investment Board (SLIB), if those projects meet these criteria and if the WWDC agreed to recommend refinancing prior to the application for SLIB funding.

In order to further clarify the list defined under program priorities, the following are examples of projects/investments that shall not be considered for funding under the program:

1. Refinancing of Previously Completed Improvements -- Refinancing of existing projects that have been financed with non-state resources is not an allowable program expense. Further, refinancing may conflict with goals and objectives of other programs.
2. Wastewater Projects -- Wastewater treatment plants and/or collector systems shall not be funded under the program.

3. Environmental Enhancement -- Although the feasibility of providing or rehabilitating environmental improvements shall be considered on all program projects, the program does not have the resources to pursue projects that solely serve environmental enhancement purposes.

4. Flood Control -- Projects that deal solely with flood control are essential in many parts of the state. There are active federal funding programs that serve this purpose. Therefore, sponsors are encouraged to seek funding from these alternate sources.

5. Rehabilitation of Hydropower Projects -- Existing hydropower facilities should be generating sufficient revenues to perform operation, maintenance, and replacement without state assistance.

6. Erosion Control -- While improvements to natural streams are sometimes necessary to keep existing water supplies viable, these improvements are typically performed through private or federal funding and should not be funded under the program.

7. Distribution Systems -- For purposes of program implementation, distribution systems are considered to be those facilities whose primary purpose is to deliver water to individual users. There is alternate financing available for distribution systems through other state and federal programs.

8. Water Treatment Facilities -- Historically, the program has not participated in water treatment facilities with the exception of disinfection facilities needed to connect groundwater wells to a supply system when it expedites the completion of the project. While the need for improvements to treatment facilities has been considered in the generation of financing plans for program projects, the funding for water treatment improvements has been considered the responsibility of the sponsor.

9. Subdivisions – For those subdivisions required to undergo review pursuant to W.S. 18-5-306(c), the WWDC shall disqualify a project proposed to correct problems identified in the review performed by the Department of Environmental Quality where the Board of County Commissioners approved a subdivision application notwithstanding the Department's recommendation that the application be disapproved.
E. Levels of Project Development

The following levels of project development are based on complex new development projects. Some aspects of the studies may not be necessary for some new development projects or rehabilitation projects in which the scope of the project is better defined.

1. Level I Study Description

Level I studies are preliminary analyses and comparison of development alternatives. However, the designation of a Level I study is also used for master plans, watershed improvement studies and other water planning studies. The following outline relates to project specific Level I studies:

a. The typical Level I study shall identify or provide the following:

i. Development options;

ii. Potential project beneficiaries and the benefits each option could provide;

iii. Factors that could impair or prohibit the development of any identified option including legal constraints;

iv. An analysis of water rights including identification of conflicting prior rights; and

v. Option comparisons based on physical and legal water availability, technical, economic, legal, and environmental considerations.

vi. A review of the sponsor’s methods for financing the operation, maintenance, and replacement of the existing water supply.

b. Level I studies shall be performed in sufficient detail to identify projects or project options, if any, that should be pursued. In evaluating projects that could be advanced to Level II, the following considerations shall be made:

i. Whether there is an opportunity to economically develop water or maintain an existing supply for Wyoming's use and benefit;
ii. Whether the project may be configured to provide service to a regional service area encompassing more than a single entity;

iii. Whether there are viable solutions to resolve technical, legal and environmental problems.

2. Level II, Phase I – Study Description

The typical Level II process consists of two phases, which serve first to address project feasibility and then, if the project is determined feasible, to refine the project to the status necessary for a Level III funding request.

a. A Level II, Phase I investigation shall provide the following:

i. A reasonable quantification of the amount of water that can physically and legally be developed or maintained;

ii. A determination of water needs that could be or are being served by the project;

iii. A determination of technical feasibility including a safety analysis; and for dam and reservoir projects (including stock ponds), a geotechnical and basin geomorphology analysis;

iv. A general configuration depicting preliminary physical characteristics of the project;

v. A preliminary project operation plan;

vi. Cost estimates for construction, consultant services, and operation, maintenance, and replacement;

vii. Identification of direct and indirect benefits that result from the implementation of the project;

viii. Identification of costs and benefits that would result by incorporating recreation, hydropower generation, and flood control functions into the project operation;

ix. A definition of economic, legal, environmental, and administrative problems and identification of alternate solutions to those problems;
x. Identification of lands that may be affected by the project;

xi. An analysis of the project sponsor's ability to pay;

xii. A determination of project components that are eligible for WWDC funding and project components that are not eligible; and

xiii. A financing plan identifying changes in the sponsor's water financing methods including water rates or charges, tap fees, sinking funds, and other revenues that should be implemented to fund the project. In addition, the financing plan should address alternate sources of funding for the project including project components that are not eligible for WWDC funding. The financing plan should provide a comparison of alternate sources of funding identifying the costs and schedule associated with achieving such funding. Associated inflation costs caused by the time required to achieve the funding will be considered.

b. Once all Level II, Phase I investigations have been completed, the WWDC will evaluate the results and will consider the sponsor's need for the project, interest in the project, and willingness and ability to financially participate in the project to determine if the project should proceed to Level II, Phase II.

3. Level II, Phase II – Study Description

A Level II Phase II investigation shall include the following design and technical services:

a. Hydrological investigations;

b. An operating plan that addresses water management during and after construction;

c. A conceptual design and general configuration of the project;

d. The identification of state and federal permits and clearances necessary to construct the project;
e. An environmental analysis, including environmental assessments, etc., of the proposed project’s operation and configuration, including:

i. The identification of anticipated impacts on or improvement to water quality which may occur as a result of the project, i.e., total dissolved solids or total suspended solids, etc.;

ii. An assessment of the longevity of dam and reservoir projects, including stock ponds, with respect to sediment loading and hydrologic events;

iii. Identification of the potential to develop wetlands eligible for Wyoming’s Wetland Banking Program; and

iv. The performance of a cultural resource survey of the general project area, as applicable;

f. The development of a detailed schedule of the activities necessary to complete the project;

g. The preparation of an itemized project budget that includes costs for design engineering, permitting, land acquisition, construction, construction engineering, operation, maintenance and replacement, and a financing plan; and

h. The preparation of a socioeconomic analysis of the costs and benefits of the proposed project. This analysis shall include the net present value of the stream of benefits and costs associated with the project. The net present value shall be calculated using a discount rate based on a real rate of return as opposed to a market or nominal rate of return. Sociological and environmental consequences of the project shall be described where values are difficult to place on either benefits or costs.

4. Input from Local Officials

During the Level II process when it is apparent that the project will be a candidate for Level III funding, the following analyses will be completed:

(a) implications of the project on water and energy use of the community or general area;
(b) implications of the project on the future growth of the community or general area; and

(c) the impacts of the project on the operating expenses of any other city, county or special district possessing jurisdiction over a service obligation to the project area.

Written verification from the impacted city, county, or special district must be submitted documenting that the impacts to them are understood and accepted.

5. Level II, Phase III -- Dam and Reservoir Program only

a. This phase of development pertains to projects that enlarge existing storage projects by 1,000 acre-feet or greater or for proposed new dam and reservoirs with a capacity of 2,000 acre-feet or greater. Work included under this phase includes final engineering design, reviews required by the National Environmental Policy Act, consultations required by the Endangered Species Act, and acquisition of state and federal permits.

b. Legislative approval, through the omnibus water bill process, is required before initiation of Level II, Phase III activities.

6. Level III Construction

The following activities must be addressed once the Legislature appropriates funds to construct the project:

a. The project agreement, note and mortgage, which formalize sponsor and WWDC project responsibilities and the financing procedures, shall be the first activity undertaken. Funds cannot be committed for expenditure until these documents are executed.

For those projects where the sponsors wish to pursue construction using their own manpower and equipment, the project agreement shall reflect that funding is only available to pay the cost of invoiced materials. Permit and easement acquisition and retaining labor, equipment and professional services are the obligation of the sponsor.
b. For projects that are funded through a combination of funding sources, the sponsors shall certify that all funding has been secured and is available for project purposes before construction can commence.

c. Professional services required for final design, permitting and construction engineering shall be secured pursuant to the requirements of the State Board of Engineers and Surveyors and the Board of Registration for Professional Geologists.

The sponsor may elect to retain the WWDC’s Level II consultant. However, if a consultant selection process is implemented, the sponsors will be encouraged to use WWDC consultant selection procedures for Level III services in the absence of statutory or other legally described procedures.

d. For projects other than storage projects, environmental impact statements or assessments shall be prepared, as required.

For storage projects, environmental review and permitting shall be addressed during the Level II, Phase III Study.

e. For projects other than storage projects, permit applications shall be prepared to secure all necessary construction permits and approvals.

For storage projects, environmental review and permitting shall be addressed during the Level II, Phase III Study.

f. For projects other than storage projects, the construction documents, including technical specifications, contract documents and bidding plans shall be prepared. This work may be performed concurrently with the permitting process if it doesn’t adversely impact project feasibility.

For storage projects, final engineering design, the construction documents, including technical specifications, contract documents and bidding plans, shall be prepared during the Level II, Phase III Study. This work may be performed concurrently with the permitting process. The Commission may issue a stop work order for those storage projects where ongoing permit activities indicate that the project may be fatally flawed.
g. Easements or fee titles necessary to construct the project shall be acquired. The scheduling of this task shall be sequenced to minimize impacts to property owners and to expeditiously construct the project.

h. Mitigation of project impacts on cultural resources shall be undertaken.

i. After the above activities are completed, the construction bidding process can be initiated.

j. Construction of the project and construction administration/inspection shall commence upon the acceptance of the bid and upon the issuance of the notice to proceed.

k. The date project benefits accrue to the sponsor, for purposes of triggering loan repayment schedules, shall be determined by the Commission.

l. Once compliance with regulatory permitting conditions has been achieved and reclamation and mitigation activities have been completed, project close-out procedures may be initiated.

F. Sponsored and State Projects

Projects can proceed as sponsored projects or state projects.

1. Sponsored Projects

The project sponsor shall be a public entity that can legally receive state funds, incur debt, generate revenues to repay a state loan, hold title and grant a minimum of a parity position mortgage on the existing water system and improvements appurtenant to the project or provide other adequate security for the anticipated state construction loan. A project sponsor can be a municipality, irrigation district, joint powers board, or other approved assessment district, which will realize the major direct benefits of the project. The project sponsor must be willing and capable of financially supporting a portion of the project development costs and all operation and maintenance costs. Typically, sponsors request project technical and financial assistance from the WWDC through the application process.
The sponsor may request that a Level I or Level II study be conducted to identify solutions and alternatives for addressing water supply issues or they may request funds for a Level III construction project, if it is determined the project is technically and economically feasible and serves to meet a water supply need or alleviate a water supply problem.

2. State Projects

The typical state project serves to benefit more than one entity and is multipurpose in nature. Another common characteristic of state projects is that each has a difficult permitting or political issue, which must be addressed. These issues may include developing a partnership with the federal government, another state, and/or private industry to encourage project development; resolving endangered species, water quality, or wetland issues; or addressing resistance to the project from downstream states.

The WWDC shall consider investments in state projects on a case-by-case basis. However, it should be recognized that present federal laws and regulations make it difficult to achieve federal clearances for projects in which there is not a clearly defined purpose and need.
Chapter III  Funding Procedures

A.  Project Sponsor/Public Entity

The project sponsor shall be a public entity that can legally receive state funds, incur debt, generate revenues to repay a state loan, hold title and grant a minimum of a parity position mortgage on the existing water system and improvements appurtenant to the project or provide other adequate security for the anticipated state construction loan.

The WWDC may waive the requirement that the project sponsor be a public entity under the following exceptions:

1. The WWDC may accept applications for Level I studies from applicants that are not public entities. This will allow the applicant to know if there is a viable project prior to becoming a public entity. However, the applicant must be a public entity before applying for a Level II study. Under these circumstances, the Level I process will have a two-year duration with the study being completed the first year and the sponsor forming a public entity the second year.

2. The WWDC may accept applications related to the construction of dams and reservoirs from applicants that are not public entities. As the evaluations of the feasibility of new dams are complex, this will allow the applicant to know if the proposed reservoir is feasible prior to becoming a public entity. However, the applicant must be a public entity before applying for Level II, Phase III funding.

B.  Applications for Projects New to the Program

1. Requirements for New Applications

The due date for new project applications and application fees is August 15 of each year. The application must include a description of the project, a listing of available information pertinent to the project, and information describing the financial capabilities of the sponsor. The following must accompany the application:

a. An application fee of one thousand dollars ($1,000.00) must be submitted with each application. The application fee shall be deposited into Water Development Account No. I. Acceptance of the fee does not obligate the Water Development Commission or State of Wyoming to fund a study or provide construction funding for any proposed project or purpose. If the application is denied, then seventy-five percent (75%) of the application fee shall be
refunded to the applicant. The authority to require an application fee is provided by W.S. 41-2-118(a)(xii).

b. A certified original of a resolution passed by the council or governing body of the sponsoring entity shall be provided with an application unless the applicant qualifies for one of the exceptions provided in Section A. Applicants qualifying for the exceptions shall provide evidence of support for the application by providing letters or petitions from interested water users as a substitute for a resolution.

c. The following financial information:

i. The annual budget for operation, maintenance, and replacement of the water supply system;

ii. The existing balance in any emergency funds and sinking funds for the water supply system;

iii. Water rates, tap fees, and other revenue sources; and

iv. Amount of funding obtained from other revenues for operation, maintenance, and replacement of the water supply system.

d. To become eligible for funding, the WWDC shall require sponsor certification related to compliance pursuant to public water system rate requirements as set forth in W.S. 15-7-602, W.S. 16-1-108, and W.S. 41-10-113.

2. Review Requirements for New Applications

Review of new applications shall comply with or address the following:

a. The WWDO project manager assigned to review the application shall advise the applicant of the timetable for project review and evaluation.

b. A representative of the WWDO shall inspect the proposed project site.

The acceptance of the project application for incorporation into the program shall be based on the following criteria:
a. The proposed project must be consistent with the goals and objectives of the Wyoming Water Development Program as outlined in W.S. 41-2-112 and these criteria.

b. The Water Development Program must be the most appropriate source of funds for project study and construction.

c. There must not be any apparent economic, legal, environmental or technical problems that would impair or prohibit project development.

d. The proposed projects must serve twenty (20) or more municipal/domestic water taps with individual water meters for each tap or 2,000 or more water righted acres.

e. Sponsors who pass a local capital facilities tax, commit other local tax revenues to a project or secure funding from non-state sources may receive a priority ranking when compared with projects of a similar nature without such funding sources. While the Water Development Program provides for loans and grants, the willingness and ability of project sponsors to assume responsibility for repayment of project costs shall be a factor in the selection of projects to receive state assistance.

C. Applications for Level II Projects

1. Requirements for Applications for Level II Projects

   a. Applications seeking Level II status for a project new to the program must comply with the requirements specified in section B.1.

   b. The due date for applications for Level II status for projects already in the program, which are seeking funding for an advanced study level or for construction, is October 1 of each year. Application fees are not required. Sponsors of continuing projects may apply by submitting a letter with a copy of a resolution of the governing body attached unless the applicant qualifies for the exception provided in Section A.2. Applicants qualifying for the exception shall provide evidence of support for the application by providing letters or petitions from interested water users as a substitute for a resolution.
2. Review Requirements for Level II Status

   a. The WWDC may introduce projects into the program at Level II status if the application provides a definition of the project configuration and there is evidence that project will provide a viable water supply or rehabilitate an existing water supply. Often, rehabilitation projects can be introduced into the program at Level II status as the projects are clearly defined.

   b. After the Level I studies under the Program are completed, the WWDC shall initiate its review process to determine if the project should proceed to Level II. During its November meeting, the Commission shall review the findings of the Level I report, consider the sponsor's input, and make its preliminary recommendations.

D. Applications for Level III Projects

1. Requirements for Applications for Level III Projects

   a. Applications seeking Level III status for a project new to the program must comply with the requirements specified in section B.1.

   b. The due date for applications for Level III status for projects already in the program, which are seeking funding for an advanced study level or for construction, is October 1 of each year. A copy of a resolution of support from the governing body must be attached to the application. Application fees are not required.

   c. Written verification from any city, county, or special district that is impacted by the project that they understand and accept those impacts. See subsection E.4 of Chapter 2.

   d. All applications for Level III funding for subdivision or rural domestic projects must be accompanied by a letter or a resolution of support from the effected city council and/or county commission.

2. Review Requirements for Level III Status

   a. The WWDC may introduce projects into the program at Level III status if the project sponsor has completed a feasibility study that meets WWDC requirements.
b. After the Level II studies under the Program are completed, the WWDC shall initiate its review process to determine if the project should proceed to Level III. During its November meeting, the Commission shall review the findings of the Level II report, consider the sponsor's input, and make its preliminary recommendations.

Projects shall not progress to Level III construction status unless the sponsor and state are committed to complete the project. Issues that shall be considered and addressed in the development of Level III recommendations include:

a. Whether the project yields a water supply capable of meeting present needs;

b. Whether the project will yield a reserve water supply to meet future needs;

c. Whether the project is affordable given the existing status of the water development account and prior commitments to the account;

d. Whether the project appears to be a good investment for the State of Wyoming considering primary, secondary or indirect project benefits;

e. Whether the project is economically feasible for the sponsor after all project costs are considered, including debt retirement and costs of project operation, maintenance and replacement;

f. Whether the project sponsors are willing to establish a revolving fund to pay costs associated with the repair or replacement of project components that may wear out or malfunction twenty years from the date those components were incorporated into the system.

g. Whether the project sponsors and/or beneficiaries are willing to assume financial responsibility for the project. Whether the project sponsors understand the scope of the project. Whether the project will meet the sponsor’s needs. Whether the project sponsors understand they are obligated to assure that the project must be designed and inspected by registered professionals, i.e., licensed engineers and geologists. If the sponsors wish to pursue construction using their own manpower and equipment, whether they
understand the funding limits established by the state. Once construction is initiated, whether the project sponsor understands that they cannot voluntarily abandon the project without repaying state grants and loans, including lost interest-earning opportunities.

After the Level II analysis and report have been completed, the Commission shall determine if the project should be elevated to a Level III construction status.

After other funding sources have been considered, the Water Development Program’s per tap or per acre investment shall be compared to the sponsor’s ability to pay. Project sponsors shall be given the option of making a formal presentation to the WWDC relative to that sponsor’s ability and willingness to pay for the project if the Commission determines that the project should not advance due to high repayment costs. The need for the project, the direct and indirect benefits of the project, and any other information the sponsor deems as reasons the project should be advanced or funded, shall be included in the presentation.

3. Level III Funding Considerations

The Commission shall consider project specific information and sponsor input, when developing its preliminary recommendations for Level III projects. If it is determined that the project should proceed to Level III, the following shall also be addressed in the Commission’s recommendations:

a. Project Budget

The project budget shall include costs associated with project permitting, design, land acquisition, construction engineering, and construction.

b. Level I and Level II Study Cost Sharing

The WWDC shall determine if the sponsor should be required to pay a portion of the Level I or Level II study costs incurred to develop the recommended alternative needed to secure funding for Level III construction. Typically, the WWDC is the lead agency in developing Level I and Level II reports. The Commission solely funds the studies to insure the reports are unbiased and performed in such a manner as to determine whether the state should invest in the project. This procedure was also established because the project is
better served if the sponsor uses its financial resources to fund its share of the project or to service the debt associated with the construction loan. However, in those exceptional cases where the sponsor assumes the role of lead agency in Level I and Level II studies, it shall share in the costs of those studies. Further, if through the Level II process, a groundwater well is developed that will be used as the water source for a Level III project, the sponsor shall share in the cost of the well.

On dam and reservoir projects, the sponsor shall share in the cost of the Level II, Phase III services unless the WWDC agrees to pay these costs in accordance with subsection e, below.

c. Financial Plan - Loan Grant Mix

i. The maximum grant shall be seventy-five percent (75%) for proposed Level III projects. In order to obtain the maximum grant, the sponsors must demonstrate to the WWDC that the maximum grant is warranted due to severe financial hardship.

ii. The typical grant shall be sixty-seven percent (67%) for proposed Level III projects. In order to obtain the typical grant, the sponsors must demonstrate to the WWDC that they have taken steps or are willing to take steps to make their water supply systems financially self supporting.

iii. The WWDC may provide lesser grant amounts for proposed Level III projects that do not qualify for i or ii, above.

d. Financial Plan - Terms of the Loans

i. Statutory guidelines establish a minimum rate of four percent (4%) for program loans. The current rate is 4% but may be increased by the Legislature.

ii. W.S. 41-2-121 specifies the term of the loans cannot exceed fifty (50) years after substantial completion of the project. Further, the term of the loan shall never exceed the economic life of the project.
The sponsor's method of loan repayment (water rates, taxes, bonds, etc.) shall also be considered in establishing the term of the loan.

iii. The statutes allow the WWDC to recommend that the payment of interest and principal be deferred up to five (5) years after substantial completion of the project. In addition, the WWDC can recommend that the accrual of interest also be deferred during the term of the payment deferral. These special conditions shall be granted only on a limited basis. The sponsor's method of repayment and the longevity of the sponsor's existence as a legal entity shall be key considerations in determining if this deferment should be granted. In no event can the combined deferment and term of the loan exceed fifty (50) years.

e. Financial Plan – Special Considerations for Dams and Reservoirs

i. The WWDC may recommend a loan/grant mix based on the sponsor's ability to pay a portion of the project costs and all of the operation, maintenance, and replacement costs.

ii. The WWDC may recommend that permitting and design costs be paid by the program thereby reducing the costs applied to the loan/grant mix.

iii. The WWDC may recommend that the program pay for the storage capacity needed to provide water for environmental mitigation and enhancement thereby reducing the costs applied to the loan/grant mix.

iv. The WWDC may recommend any combination of the above.

f. Financial Plan–Special Considerations for Subdivisions or Rural Domestic Projects:
i. In accordance with the WWDC’s support of the regional concept to solve water supply problems, funding preference will be given to those water supply projects for subdivisions or rural domestic projects that are proposing to connect to another existing public water supply system.

ii. Financing plans for water supply systems for subdivisions or rural domestic projects will ensure that the developer of the subdivision does not receive a “windfall” from project funding provided by the WWDC.

g. State/Local Partnership

The program has a philosophy that water development can be achieved through state/local partnerships. The sponsor can complete a water supply project with state funding assistance. If the sponsor uses all of the water, the project basically belongs to the sponsor. However, if there is the opportunity to sell water for other purposes, the sponsor and state share in the revenues. This insures that a project sponsor will not receive a "windfall" from the sale of water that was made available, in part, from a state grant. Therefore, if the project develops a new water supply, the WWDC shall establish the terms of the program's participation in the future sale of water in the project agreement in the following manner:

i. There shall be no lease, sale, assignment or transfer of ownership of more than 100 acre feet of water per year from municipal or irrigation projects funded by the program without prior written approval of the WWDC.

ii. There shall be no lease, sale, assignment or transfer of ownership of water from rural domestic projects funded by the program without prior written approval of the WWDC.

iii. If the WWDC approves such sales, the program will receive a share of the revenues from the sale commensurate with the percent of the grant used to construct the project.

h. Sale of Projects

There shall be no lease, sale, assignment or transfer of ownership of a project funded by the program until the project loan is paid in full and until prior written approval is obtained from the WWDC.
The WWDC will ensure that the project sponsor does not receive a "windfall" from the state’s investment in the project.

i. Abandonment of Construction Projects

If the WWDC determines that any project sponsor has, without good cause, abandoned the completion of the project, that sponsor, in addition to being required to repay the loan, shall be obligated to repay the grant funds actually expended plus interest as established by the state auditor in an amount equal to the interest that would have accrued on the expended grant funds. If these payments are deemed by the WWDC to provide a financial hardship on the sponsors, the WWDC may recommend to the legislature that a loan be approved to repay the program. The recommended interest on the loans will be 4% per year and the term will be based on the ability to pay of the sponsor.

E. Recommendation Process

The Water Development Commission uses the following process to generate funding recommendations for legislative consideration.

1. New Applications

The deadline for new project applications is the fifteenth of August. Upon receipt, new applications and supporting documentation are reviewed, and project sites are visited. The WWDC makes preliminary recommendations regarding applications at its November meeting.

2. Existing Projects

Typically, consultant project reports are drafted by the first of October. These reports are reviewed to determine whether the projects warrant advancement in the program.

3. Preliminary Recommendations

At the November WWDC meeting, the WWDO director presents funding recommendations for new applications and existing projects. Project sponsors are given the opportunity to present their requests. The WWDC takes preliminary action on the sponsor’s request at this meeting.
4. Public Meetings

If a proposed Level I Reconnaissance Study or Level II Feasibility Study is of particular concern or controversy, the WWDC may solicit public input at a public meeting prior to finalizing its project recommendation.

5. Public Hearings

The Commission holds formal public hearings on all projects that are proposed for Level III Final Design and Construction funding.

6. Coordination with the Governor

The WWDC provides the Governor with its preliminary recommendations and a financial report addressing impacts to the water development accounts. The Governor may provide input throughout the recommendation process.

7. Final Recommendations

The WWDC meets in December or early January to finalize its legislative recommendations on new applications and existing projects. The Commission considers public input received at the meetings and hearings and recommendations from the Governor. Sponsors and interested parties who disagree with the Commission’s preliminary recommendation are provided the opportunity to address the Commission with their concerns.

8. Select Water Committee

The Select Water Committee is comprised of 6 senators and 6 representatives. They provide legislative oversight for the program, and review the Commission’s recommendations and budgets. Typically, the Select Water Committee serves as sponsor for the Water Development Program legislation.

9. Legislative Process

The legislature must authorize the allocation of funds from the water development accounts to particular projects. This approval is solicited through the Omnibus Water Planning and Construction Bills.
CHAPTER IV. Water Resource Planning

The Wyoming Water Development Commission serves as the water-planning agency for the State of Wyoming. The water development planning function is an important aspect of the Water Development Program. Because the issues facing water development in the West are complex, the scope of the WWDC's planning efforts is not as closely defined as the New Development, Rehabilitation, and Dam and Reservoir Programs. The planning aspects of the Wyoming Water Development Program establish the framework for development strategies and serve to identify and resolve water issues. The source of revenue for the planning function of the program is typically Water Development Account No. I.

A. River Basin Plans

The program develops basin wide plans for each of the state's major drainage basins. These plans identify water supply problems and development opportunities. The plans serve to promote interest from water users who may become interested in a particular project and become project sponsors. Basin plans shall include the development of a water related database to provide data and information to developers and resource managers.

B. Watershed Improvement Studies

These studies provide a detailed evaluation of an individual watershed. The studies may identify water development and system rehabilitation projects as well as address erosion control, flood control or other non-water development related environmental issues. Watershed improvement studies are an integral part of the Small Water Project Program, which has its own specific criteria. The studies may identify projects that may be eligible for the New Development, Rehabilitation, or Dam and Reservoir Programs.

C. Master Plans

Master plans provide a service to municipalities, districts and other entities to assist in the preparation of planning documents, which serve as a blueprint for future water supply system improvements. Master plans also serve as a framework for the entities to establish project priorities and to perform the financial planning necessary to meet those priorities.

In addition, master plans assist entities in preparing the reports necessary to achieve federal funding assistance for water development, flood control, erosion control, hydropower, rehabilitation, watershed improvements and other water related projects.
Sound water planning serves to promote the effective and efficient use of available water resources. Master plans provide information to users as to whether the resource can adequately service the existing and anticipated demands for water within a certain area and provide reconnaissance level information regarding costs and scheduling.

D. Federal Funding

Presently, there are federal programs which provide funding assistance for some types of water development projects. However, in order to access these funds, costly feasibility/environmental studies are often needed. If these studies cause a financial burden and if the proposed project alleviates a water development, management, rehabilitation problem, or allows the continued beneficial use of water, the WWDC shall consider participating in the studies. The amount of the WWDC’S financial participation shall be based on the proponent’s ability to pay.

E. Research

Water development issues and problems may encompass watersheds, river basins or include the entire state. In order to address these issues, non-project specific research and data collection is necessary. The WWDC has developed a working relationship with state and federal agencies and the University of Wyoming to conduct water related research.

In addition, the legislature has assigned the Water Development Program the following research tasks:

1. Instream Flow

The Wyoming Game and Fish Department (WGFD) selects candidate stream segments for instream flows. The WWDC files water right applications with the State Engineer for permits to appropriate water for instream flows in those segments of stream recommended by the WGFD. Further, W.S. 41-3-1004 assigns the WWDC the responsibility to generate feasibility reports for all instream flow permit applications. The reports are hydrological analyses of water availability in the reach of the stream to which the applications apply. The analyses also quantify existing water rights above and within the stream segment.

As the water-planning agency, the WWDC also reviews instream flow requests to determine whether they may conflict with future water development opportunities.
2. Groundwater Grant Program

W.S. 41-2-119 authorizes the Water Development Commission to grant funds to cities, towns, and special districts for exploration programs to evaluate the potential use of underground water for municipal and rural domestic purposes. Authorized entities are eligible to receive up to $400,000 in grant funds and are required to provide 25% of the total project costs in local matching funds. The primary purpose of the program is to inventory the available groundwater resources in the state. The program also serves to assist communities in the development of efficient water supplies. Unlike other projects within the Water Development Program, funding for projects that meet the criteria of the Groundwater Grant Program can be allocated directly by the WWDC without project specific legislation.
Appendix J

Drinking Water State Revolving Fund

SLIB Rules and Regulations

and 2011 Intended Use Plan
REGULAR RULES AND REGULATIONS
STATE LOAN AND INVESTMENT BOARD

Chapter 31

Drinking Water State Revolving Fund Loans and Principal Forgiveness – Supplemental Appropriation Funding from the American Recovery and Reinvestment Act of 2009

Section 1. Authority.

(a) This Chapter is adopted pursuant to W. S. 16-1-303(b).

Section 2. Definitions.

(a) “Board” means the State Loan and Investment Board.

(b) “Capacity Development” means that a community water system or nontransient noncommunity water system can adequately demonstrate that it has technical, managerial and financial capabilities to ensure current and future operations of the water system in accordance with all drinking water regulations in effect.

(c) “Community Water System” means a public water supply which has at least fifteen (15) service connections used year-round by residents, or that regularly provides water to at least twenty-five (25) residents year-round, including, but not limited to, municipalities and water districts.

(d) “DEQ” means the Wyoming Department of Environmental Quality.

(e) “Director” means the Director of the Office of State Lands and Investments.

(f) “Emergency” means a direct threat to the continued operation of a Community Water System.

(g) “Handbook of Procedures” means the State Drinking Water Revolving Loan Account Handbook of Procedures.

(h) “Intended Use Plan (IUP)” means the annual plan adopted by the State Loan and Investment Board and submitted to the United States Environmental Protection Agency (USEPA) that describes how the state intends to use the money in the Drinking Water Revolving Loan Account.

(i) “Municipalities” means incorporated towns and cities in Wyoming.
(j) “Noncommunity Water System” means a public water supply which is not a Community Water System, including but not limited to, public schools, state park recreational areas and state highway public rest areas.

(k) “Office” means the Office of State Lands and Investments which provides administrative and operational management of programs for the State Loan and Investment Board.

(l) “Operator” means the person who is directly responsible for and in charge of the operation of a water treatment plant or water distribution system.

(m) “Priority List” means the list of projects expected to receive financial assistance under the Program, ranked in accordance with a priority system developed under Section 1452(b)(2)(A) of the Safe Drinking Water Act.

(n) “Program” means the drinking water state revolving fund program pursuant to Section 1452 of the Safe Drinking Water Act (42 U.S.C. § 300j-12).

(o) “Publicly Owned Water System” means a water system which is owned, operated, managed and maintained by an entity of the state, county, city, township, town, school district, water district, improvement district, joint powers board or any other entity constituting a political subdivision under the laws of this state which provides water for use and consumption of the general public through pipes and other constructed conveyances, and which is not owned, operated, managed or maintained by a private individual, association or corporation.

(p) “Safe Drinking Water Act” (SDWA) means the federal Safe Drinking Water Act including the 1996 amendments (Public Law 104-182, 42 U.S.C. § 300f et seq.).

(q) “Select Water Committee” means a state legislative committee comprised of six (6) members from the Wyoming State Senate and six (6) members from the Wyoming House of Representatives (W.S. 21-11-101).

(r) “Special district” means improvement and service districts and irrigation districts in Wyoming.

(s) “State environmental review process” (SERP) means a review by DEQ pursuant to W.S. 16-1-304(a) of potential environmental impacts of projects receiving assistance from the state drinking water revolving loan account.

(t) “Substantial completion” means that stage in a project when the capital infrastructure constructed is capable of initiating operations or can be used for its intended purpose.
(u) "Water Supply System" means a system from the water source to the consumer premises consisting of pipes, structures and facilities through which water is obtained, treated, stored, distributed or otherwise offered to the public for household use or use by humans and which is part of a community water system or a noncommunity water system.

(v) "WDO" means the Wyoming Water Development Office which provides administrative and operational management of the programs administered by the Wyoming Water Development Commission.

(w) "USEPA" means the United States Environmental Protection Agency

Section 3. General Policy.

(a) Funding for loans and principal forgiveness under this Chapter is subject to a supplemental congressional appropriation in the American Recovery and Reinvestment Act of 2009. To facilitate key provisions of this Act the Board will consider funding applications for:

i) Environmental protection and infrastructure investment that will provide long term economic benefits;

ii) Green infrastructure, water or energy efficiency improvements or other environmentally innovative safe drinking water projects through August 17, 2009;

iii) Conventional safe drinking water projects that can be under contract or construction not later than February 16, 2010; and

iv) Refinancing or restructuring the debt obligations of eligible applicants where the debt was incurred on or after October 1, 2008.

(b) The Board shall award loans and principal forgiveness under the provisions of this Chapter in such a manner and to such applicants as shall, in the judgment of the Board, inure to the greatest benefit of the citizens of the State of Wyoming and represent a prudent use of available funding.

Section 4. Loan and Principal Forgiveness Eligibility.

(a) Applicants. Publicly Owned Water Systems in Wyoming shall be eligible for loans and principal forgiveness under this Chapter. If the applicant is a special district or a joint powers board, it must be legally formed and approved prior to submitting its loan application. Applicants must be in compliance with all applicable reporting requirements of both the Wyoming Department of Revenue and the Wyoming Department of Audit prior to their application being considered by the Board.

(b) Purposes. Loans and principal forgiveness shall be awarded only for eligible Publicly Owned Water Systems as authorized in W. S. 16-1-305. Eligible projects may be
comprised of improvements to all components of a Water Supply System as appropriate and permitted by the Safe Drinking Water Act.

(c) Project Eligibility. Only priority list projects on the 2010 Drinking Water Intended Use Plan are eligible for loans and principal forgiveness under this Chapter.

(i) To the extent that there are sufficient eligible project applications, not less than twenty percent (20%) of the funds appropriated under this Chapter shall be reserved for safe drinking water projects comprised of green infrastructure, water or energy efficiency improvements or other environmentally innovative activities.

(ii) The remaining funds appropriated under this Chapter shall be reserved for conventional safe drinking water projects. Preference will be given to those conventional projects that can be under contract or construction no later than January 1, 2010. The Board will not consider conventional projects that cannot be either under contract or commence construction by February 16, 2010.

(iii) Applications for eligible projects as set forth in the special funding reservation in subsection (c)(i) will be accepted for review by the Office only through August 17, 2009. Subsection (c)(i) projects are also further subject to the deadlines set forth in subsection (c)(ii) of this section. Thereafter, following Board action on all such subsection (c)(i) applications received, the Office will seek approval from USEPA to move any unobligated reserve funds in subsection (c)(i) to subsection (c)(ii) conventional safe drinking water projects. Upon USEPA approval, funds moved to subsection (c)(ii) become available for award by the Board for both green and conventional infrastructure projects.

(iv) To maximize loan funding utilization under this Chapter, and under Chapter 16 rules as established by the Board, the Board may require applicants to secure a portion of project funding from either Chapter 16 or other sources. All eligible applicants are eligible to receive a loan under this Chapter up to fifty percent (50%) of eligible project costs. All loans awarded under this subsection shall receive one hundred percent (100%) principal forgiveness up to fifty (50%) of eligible project costs.

(v) To maximize loan funding utilization under this Chapter only, the Board may award loans up to one hundred percent (100%) of eligible project costs. In addition, the Board may also award principal forgiveness up to one hundred percent (100%) for loans awarded under this subsection. The Board will use the following guidelines to determine appropriate loan and principal forgiveness percentages:

(A) the municipality either levied at least seven (7) mills for operating expenses including special districts levies chargeable against the general city or town levy during the current state fiscal year or is imposing the optional tax permitted by W.S. 39-15-204(a)(i) or (iii) at the time of application and is utilizing all other local revenue sources
reasonably and legally available to finance the project; or

(B) The county or special district either levied at least eleven (11) mills for operating expenses during the current fiscal year or is imposing the optional tax permitted by W.S. 39-15-204(a)(i) or (iii) at the time of the application and is utilizing all other local revenue sources reasonably and legally available to finance the project.

(C) Additional factors that the Board may consider include, but are not limited to, an entity's Annual Median Household Income (AMHI) per the 2000 U.S. Decennial Census and the entity’s water and sewer rates as compared to state wide averages.

(d) Ineligible Project Costs. The following project costs shall be ineligible for reimbursement:

(i) Costs for any asset that is owned by a private property owner;

(ii) Costs for tap fees, sewer and water fees, and plant investment fees;

(iii) For projects less than $500,000, engineering fees, including design, inspection and contract administration costs exceeding thirty percent (30%) of project costs;

(iv) For projects $500,000 or more, engineering fees, including design, inspection and contract administration costs exceeding twenty percent (20%) of project costs;

(v) All non-cash costs except land which is integral to the treatment process and if allowable under federal law;

(vi) Costs for preparation or presentation of grant or loan applications for any source of funding;

(vii) Costs for transportation, meals and lodging incurred anywhere away from the site of the project;

(viii) Costs of tools and furnishings for capital projects, including but not limited to, capital equipment, hammers, tanks, tools, furniture, drapes and blinds not integral to and necessary for the project;

(ix) Legal fees;

(x) Costs related to the issuance of bonds;
(xi) Costs for real property in excess of current fair market value and/or costs for an amount of real property in excess of that needed for project purposes;

(xii) Costs to establish and form special districts or joint powers boards;

(xiii) Costs incurred prior to loan award, except costs incurred for architectural and engineering design, surveying, state environmental review process (SERP) requirements or in emergency circumstances;

(xiv) Costs for a contingency or extra work allowance in excess of ten percent (10%) of estimated construction costs.

Section 5. Application Procedure.

(a) Applications. Separate loan applications shall be prepared for each eligible project. Applicants shall submit a completed application on a form provided by the Office or as outlined in the Handbook of Procedures.

(b) Timing of Board Consideration. Applications must be received by the Director at least forty-five (45) days prior to any regular or special meeting of the Board. Applicants must cure any defects in their applications no later than twenty (20) calendar days before any regular or special meeting of the Board. The Board may consider applications for loans and principal forgiveness under this Chapter at any regular or special meeting.

(c) Incomplete Applications. Incomplete applications for loans may not be presented to the Board for consideration.

Section 6. Evaluation.

(a) Criteria. The Board shall evaluate applications for loans and principal forgiveness utilizing the following criteria:

(i) Whether the applicant is current on all its loan repayment obligations to the Board;

(ii) Whether the applicant’s dedicated source(s) of repayment will be sufficient to repay the loan;

(iii) Whether the applicant’s project addresses green infrastructure, water or energy efficiency improvements or other environmentally innovative activities;

(iv) Whether the applicant’s project can be under contract or construction by
January 1, 2010;

(v) Whether applicant’s project fits a categorical exclusion from the state environmental review process or whether state environmental review process requirements can be timely met;

(vi) Whether the applicant has established an operations and maintenance costs fund for the project for which applicant seeks funding;

(vii) The financial need of the applicant as determined the Board;

(viii) Whether the applicant has made a significant commitment of funding resources for the project for which it seeks funding;

(ix) Whether the project is appropriately sized for the population to be served by the project;

(x) The percentage of the applicant’s population directly served by the project;

(xi) Whether the applicant has an appropriate project Priority List ranking as required in Section 1452(b)(3) of the Safe Drinking Water Act and is listed on the fundable portion of the Intended Use Plan;

(xii) Whether the applicant can demonstrate Capacity Development capabilities in compliance with Section 1420(b)(3) of the Safe Drinking Water Act and the applicable requirements of DEQ;

(xiii) Whether the applicant can obtain or ensure the certification of the Operators of the Publicly Owned Water System in accordance with DEQ rules and regulations prior to obtaining financial assistance approval.

(b) Interagency Consultation. The Office shall facilitate interagency consultation with DEQ and WDO through the review of applications for loans and principal forgiveness and the opportunity to provide comments to the Director for Board consideration. DEQ and WDO will also provide the services required under W. S. 16-1-301 through W. S. 16-1-308.

Section 7. Board Consideration.

(a) The Board shall consider each complete application for loans and principal forgiveness and may allow for comments from the applicant and Director. The Board shall also establish the amount of loans and principal forgiveness awarded and the term of the loan. The term of loans awarded by the Board shall not exceed twenty (20) years.

Section 8. Interest Rates.
(a) The interest rate for all loans awarded under this Chapter shall be zero percent (0%).

Section 9. Post Award Due Diligence.

(a) Applicants awarded loans under this Chapter must be diligent in moving projects quickly from engineering and design to bid to contract to construction. Time is of the essence. Successful loan applicants must demonstrate their post award due diligence in monthly reports to the Director, received no later than the first (1st) day of each month following the month of loan award until such time as the project is under contract or commences construction. At a minimum these reports shall detail the steps a successful loan applicant has undertaken to move its project to contract or construction.

(b) In addition to the reporting requirements set forth is subsection (a) applicants will also submit reports as required by the Office and USEPA until their loan is closed.

(c) The Board reserves the right to cancel any previously awarded loans and/or principal forgiveness for lack of post award due diligence prior to January 1, 2010. Previously awarded loans and/or principal forgiveness under this Chapter are automatically relinquished on January 1, 2010 for projects not under contract or construction. Relinquishment of funding under this subsection is necessary to provide the Board time to award relinquished funding before the federal government deobligates Wyoming’s capitalization grants on February 17, 2010. Such federal action would also preclude the State from sharing in a nationwide pool of deobligated funds.

Section 10. Repayment.

(a) Annual payments for all loans shall begin one year after substantial completion of the project as indicated in the final project contract.

Section 11. Disbursement of Loan Proceeds.

(a) Loan proceeds shall be disbursed in minimum draws of $1,000. Requests for reimbursement shall be submitted on a form provided by the Director and include supporting invoices establishing the eligibility of costs submitted for disbursements. Loan proceeds will only be disbursed for eligible project costs as set forth in this Chapter and within federal guidelines following review by the Office, DEQ and WDO.

Section 12. Audits and Inspections.

(a) The Board shall require records of loan recipients be audited annually by an independent accountant which may be part of the annual financial audit. The Board shall ensure compliance with the provisions of the federal Single Audit Act, 1996 Amendments and Office of Management and Budget (OMB) Circular A-133. The Board or its designee shall be
allowed access by loan recipient to inspect the construction and operation of the project. Loan recipients shall maintain project accounts in accordance with generally accepted government accounting standards.

Section 13. Reports.

(a) The Director, or designee, shall review all reports prepared by the Office, DEQ and WDO for submission to the USEPA.

Section 14. Funds Reserved.

(a) Four percent (4%) of the federal capitalization grant may be reserved to pay administrative costs of this program incurred by the Office and WDO. Any such reservation of funds shall be deposited into the Administrative Account.

Section 15. Program Compliance.

(a) The Board shall administer funding under this Chapter in accordance with all applicable federal laws and regulations. In addition to the specific requirements contained in the American Recovery and Reinvestment Act of 2009 the Act also contains two (2) general provisions as follows: 1) Prevailing wage requirements per the Davis-Bacon Act apply to loans and principal forgiveness for projects awarded funding under this Chapter; and 2) All applicants receiving funding under this Chapter must verify that all iron, steel and manufactured goods used in their projects were manufactured in the United States unless a waiver is obtained from USEPA.

(b) There is no waiver available for the Davis-Bacon federal minimum wage requirement.

(c) In order to receive a waiver of the buy American iron, steel and manufactured goods requirement, applicants shall inform the Office of the need for a waiver and provide any necessary information. In turn, the Office shall send a written request for a waiver to the Administrator of USEPA.

(d) If a waiver is granted by the Administrator of USEPA, the USEPA will publish such waiver with a sufficient explanation in the Federal Register.

Section 16. Fee Waiver.

(a) Administrative fees authorized by W.S.16-1-303(d) are waived for loans awarded by the Board under this Chapter.
Introduction

The 1996 Safe Drinking Water Act (SDWA) amendments include requirements for each state to prepare an Intended Use Plan (IUP) for each capitalization grant application. The IUP describes how the state will use the Drinking Water State Revolving Fund (DWSRF) to meet SDWA objectives and further the protection of public health. The IUP contains the following elements:

1. Priority List of Projects
2. Criteria and Method for Distribution of Funds
3. DWSRF Financial Status
4. Additional Subsidization
5. Green Project Reserve
6. Short- and Long-term Goals of the Program
7. Description of Set-aside Accounts and Activities
8. FY2011 DWSRF Projected Environmental Results

The Department of Environmental Quality (DEQ), Office of State Lands and Investments (OSLI), and Water Development Office (WDO) prepared the draft IUP and provided it to the public for review and comment. The DWSRF program held a public meeting on the draft IUP on May 5, 2010, in Cheyenne. Appendix 3 summarizes comments and responses from the public meeting. Additionally, pursuant to state law, DEQ, OSLI and WDO submitted the IUP to the Select Water Committee for review, comment and recommendations. The Wyoming State Loan and Investment Board (SLIB) authorized the Final Intended Use Plan at its meeting on June 17, 2010. The Final IUP will be submitted to EPA Region VIII with applications for the Fiscal Year (FY) 2010 and 2011 federal capitalization grants.

Priority List of Projects

Appendix 1 contains the comprehensive priority list of public water systems in Wyoming that have expressed interest in the DWSRF, are planning capital improvement projects, have been identified as serious public health risks, have received notices of SDWA violations, or were issued administrative orders. Not all of the projects in Appendix 1 will use SRF funds. Some systems do not yet have major projects planned; the remainder expect to proceed with projects within the next several years. Cost information is not always available. Some systems have not yet completed the feasibility or financing plans for their projects.
The DWSRF program has identified projects most likely to apply for DWSRF funds during the upcoming year. Staff bases this projection on conversations and contacts made from potential applicants. However, there is nothing implicit that these potential applications have preferential status to receive funding. Actual funding decisions will be made by the State Loan and Investment Board (SLIB) based on actual applications received and criteria determined by SLIB.

The comprehensive priority list in Appendix 1 identifies the projects most likely to apply for DWSRF funds by placing the project name in bold italics. Their total estimated cost is $69,054,000. The DWSRF program believes these are the projects that will most likely pursue funding; however, other projects from the priority list may proceed before envisioned. All projects on the comprehensive priority list are eligible to receive DWSRF loans. The State intends to fund projects in the actual application pool with both first and second round funds as needed to best meet (in the judgment of the State) the various known federal and state requirements, such as those regarding binding commitments, additional subsidization, and green project reserve, and any as yet undetermined requirements.

Criteria and Method for Distribution of Funds

The Safe Drinking Water Act amendments of 1986 and 1996 imposed many new regulatory requirements upon public water suppliers. Public health and compliance problems related to these requirements are the most influential criteria in Wyoming's project ranking system. System deficiencies, as related to public health and compliance, are also considered in the Wyoming ranking system. The financial impact of the proposed project on the system users is also considered; the communities most in need of low interest loans to fund the project are awarded points under the affordability criteria.

A summary of the ranking criteria and scoring is listed below. The complete Wyoming Drinking Water State Revolving Fund Ranking System is attached to this plan as Appendix 2.

1. Public Health Issues - 200 points maximum
2. Compliance Issues - 240 points maximum
3. System Deficiencies that may affect public health or ability to comply - 85 points maximum
4. Affordability - 30 points maximum

Because public health issues may result from a variety of causes, points may be obtained from more than one of the four ranking system categories listed above. For example, any documented public health issue, such as a boil order resulting from bacteriological contamination, would be accompanied by compliance and system deficiencies points. Points are not awarded for any issue which results from operator error. Typically, project proposals that address immediate public health receive the highest overall scores, followed by proposals that address lower risk public health threats, such as chemical contaminants present at low levels, and then by proposals that address system deficiencies that may not allow compliance with existing or future regulatory requirements before noncompliance occurs.
The Wyoming DWSRF program is required annually to use at least 15% of all funds credited to the DWSRF account to provide loan assistance to systems serving fewer than 10,000 people. Because the majority of systems in Wyoming serve fewer than 10,000 people this requirement has and will be achieved.

**Financial planning:**
The State of Wyoming bases its financial planning for the DWSRF on the following factors: fund utilization, mineral royalty grant funds available, and projected projects ready to proceed. The core loan program interest rate of 2.5% and the special terms under ARRA have increased loan applications over the last few years. In addition, the loan origination fees and the interest payments are projected to increase as projects are completed and loan repayments begin. Furthermore, the health of the fund will increase with a higher fund utilization rate to replenish the revolving fund.

**Interest rates and different types of assistance:**
At this time the core program does not offer different types of assistance to DWSRF loan applicants. The current market rate is calculated annually in May or June; the current market rate is 5%. The market rate is calculated using the Range of Yield Curve Scales, Delphis Hanover Corporation, for Bonds with a rating of Baa(86) for a twenty year period. All loans from the core program will be made at a 2.5% interest rate with a repayment period up to twenty (20) years. This rate was determined based on the following factors: mineral royalty grant funds available, current market rate, and the need to ensure maximum fund utilization. In addition, each applicant will pay a 0.5% origination fee upon completion of loan documents.

The additional subsidization program now required will make loans at 0% interest rate with a repayment period up to twenty (20) years and with forgiveness of all or a portion of the principal. In addition, each applicant will pay a 0.5% origination fee upon completion of loan documents.

**Project funding decisions and bypass procedures:**
Historically, the state has been able to fund all eligible projects which actually apply for loan funding, and it expects to be able to continue to do so during FY2011, though not all applicants will likely be able to receive the full amount of principal forgiveness for which they apply. If and when the loan application amounts exceed the funding available for loans, the state will fund projects in order of priority of those that apply. An exception may apply to projects eligible for principal forgiveness (additional subsidization) and/or green project reserve; these projects, in priority order, may bypass higher ranked projects if needed to achieve the minimum required amounts of additional subsidization and green projects. Only projects on the priority list will be considered eligible for funding, except in the case of emergencies as described below.

Non-emergency bypass procedures:
Any projects not ready to proceed, or that do not apply, will be bypassed in favor of projects that actually apply. These determinations will be made at the time the application is received or when it is presented to the State Loan and Investment Board. In addition, the state will do as much as possible to make bypassed projects ready to proceed in future years. This effort will include grant and loan seminars to help applicants arrange funding for their projects. Only
projects on the priority list will be considered eligible for funding, except in the case of emergencies as described below.

Emergency bypass procedures:
If SLIB determines that immediate attention is required to protect public health, a project may be funded with DWSRF funds whether or not the project is on the DWSRF priority list; however, the IUP must be amended to include the project. Any eligible costs would be reimbursable after the project meets DWSRF program requirements.

DWSRF Financial Status

The following table summarizes the DWSRF financial status as of 3/29/10.

**Table 1. DWSRF financial status as of 3/29/10**

<table>
<thead>
<tr>
<th></th>
<th>Federal Grant</th>
<th>State Match (20%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalization grants FY1997 through FY2007</td>
<td>$91,793,500</td>
<td>$18,358,700</td>
<td>$110,152,200</td>
</tr>
<tr>
<td>Capitalization grant FY2008</td>
<td>$8,146,000</td>
<td>$1,629,200</td>
<td>$9,775,200</td>
</tr>
<tr>
<td>Capitalization grant FY2009</td>
<td>$8,146,000</td>
<td>$1,629,200</td>
<td>$9,775,200</td>
</tr>
<tr>
<td>ARRA 2009 grant (state match not required)</td>
<td>$19,500,000</td>
<td>$0</td>
<td>$19,500,000</td>
</tr>
<tr>
<td>Capitalization grant FY2010</td>
<td>$13,573,000</td>
<td>$2,714,600</td>
<td>$16,287,600</td>
</tr>
<tr>
<td>Capitalization grant FY2011 (estimated)</td>
<td>$13,573,000</td>
<td>$2,714,600</td>
<td>$16,287,600</td>
</tr>
<tr>
<td>Total into DWSRF Accounts</td>
<td>$154,731,500</td>
<td>$27,046,300</td>
<td>$181,777,800</td>
</tr>
</tbody>
</table>

**Set-asides**

<table>
<thead>
<tr>
<th>Set-asides</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration - 4.0% of FY1997 through FY2007 grants*</td>
<td>$-3,671,740</td>
</tr>
<tr>
<td>Technical Assistance (closed out) – Amount used from FY01 grant</td>
<td>$-23,916</td>
</tr>
<tr>
<td>Source Water Assessment (closed out) - Amount used from FY97 grant</td>
<td>$-936,086</td>
</tr>
<tr>
<td>Sub-Total Set-asides</td>
<td>$-4,631,742</td>
</tr>
<tr>
<td>Total Loan Interest Payments (As of 3/29/10)</td>
<td>$11,316,788</td>
</tr>
<tr>
<td>Investment Income earned (As of 3/29/10)</td>
<td>$6,564,458</td>
</tr>
<tr>
<td>Total Loan Principal Repayments (As of 3/29/10)</td>
<td>$27,702,205</td>
</tr>
<tr>
<td>Loans (As of 3/29/10)</td>
<td>$-159,522,190</td>
</tr>
<tr>
<td>Estimated Fund Balance Available to Capital Construction Funding with FY2010 and estimated FY2011 capitalization grants (As of 3/29/10)</td>
<td>$63,207,319</td>
</tr>
</tbody>
</table>

*Wyoming reserves the authority to set aside from future capitalization grants an amount (estimated at $2,517,520) equal to four percent of the FY2008 through FY2011 capitalization grants and ARRA 2009 grant, to be used for program administration.*

A more detailed description of set-asides may be found later in this plan. Any unused administrative funds are placed in an account and used for administration in future years. After
federal capitalization grants are no longer available the program must rely solely on loan origination fees and State funds.

The state program legislation and rules provide for the collection of a ½% loan origination fee which is to be set aside in a separate account to provide for future administration of the DWSRF program. All current and future fees will be placed into an administration account.

**Additional Subsidization**

The FY2010 capitalization grant will require that not less than 30% ($4,071,900) of the funds made available under that grant must be used by the State to provide additional subsidization to eligible recipients. The State will make such additional subsidization in the form of loans with zero percent interest and principal forgiveness. SLIB will adopt new rules to cover this addition to the program and will determine the amount of principal forgiveness offered to individual applicants. Currently, all projects on the the priority list (Appendix 1) are considered eligible for principal forgiveness of up to the full loan amount. The actual amount of principal forgiveness awarded to individual projects and in total overall will depend on the criteria set forth in the upcoming rules and on the actual applications received, and it will meet the additional subsidization requirement. It is anticipated that the FY2011 capitalization grant may also include a requirement for additional subsidization; if so, the additional subsidization will be treated the same way as under the FY2010 grant.

**Green Project Reserve**

The FY2010 capitalization grant will require that, to the extent there are sufficient eligible project applications, not less that 20% ($2,714,600) of the funds made available under that grant must be used by the State for projects which address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities (collectively referred to as “green” projects). The priority list (Appendix 1) shows that sufficient green project applications are anticipated to meet the Green Project Reserve (GPR) requirement. Other projects on the priority list may be able to show, through a business case or other information, that they also are green projects; these projects too will be considered eligible for award under the GPR. New rules to be adopted by SLIB will address the requirement for a GPR. It is anticipated that the FY2011 capitalization grant may also include a requirement for a GPR; if so, it will be handled the same way as under the FY2010 grant.

**Short-term Goals**

1. To administer the Drinking Water State Revolving Fund Program in Wyoming.

2. To ensure the technical integrity of DWSRF projects through the review of compliance records; outreach efforts including presentations and training at Wyoming Association of Rural Water and Wyoming Water Quality and Pollution Control Association events and conferences; and planning, designs/specifications, and construction documents and activities.
3. To ensure the financial integrity of the DWSRF program through the review of the financial impacts of publicly owned public water supplies' loan applications, and the ability for loan repayment.

Long-term Goals

1. To build and maintain a permanent, self-sustaining state revolving fund program that will serve as a cost-effective, convenient source of financing for drinking water projects in Wyoming.

2. To provide a financing assistance program to help publicly owned public water supplies afford sustainable infrastructure and to assist them with funds to complete capital improvement projects to maintain and achieve compliance.

3. To work with other federal, state, and local assistance providers to bundle funding packages that address publicly owned public water supplies' most pressing needs.

4. To have the Office of State Lands, the Department of Environmental Quality, and the Water Development Office recommend priorities for financial assistance from the Drinking Water State Revolving Fund program to the Wyoming State Loan and Investment Board.

Set-Asides

The Drinking Water State Revolving Fund may fund certain provisions of the federal Safe Drinking Water Act, through the use of “set-aside” accounts. The DWSRF federal and state enabling legislation allows set aside amounts of the federal drinking water capitalization grant for specific purposes. These set-asides each have different purposes and conditions. Wyoming currently uses only an administration set-aside. Other set-asides which may be established include technical assistance, state program management, and local assistance. The State of Wyoming reserves its right to implement its option to fund allowable set-asides.

Administration Set-Aside

The DWSRF program set aside four percent of the FY1997 - FY2007 capitalization grants for program administration. This covers program development, review of water system facilities plans, review of construction and bid documents, assistance and oversight during planning, design and construction, loan origination work, administering repayments, costs associated with the Select Water Committee and the public comment process, staff salaries, and other associated costs to administer the program.

Any funds that were set-aside for administration but not actually spent will be placed in an account and used for administration in future years. At the direction of US EPA Region VIII, the State of Wyoming is not permitted to set aside four percent for administration starting with FY2008 and subsequent grants. That direction notwithstanding, Wyoming reserves the authority to set aside from future capitalization grants an amount (estimated at $2,517,520) equal to four percent of the FY2008 through FY2011 capitalization grants and the ARRA 2009
grant to be used for program administration. After federal capitalization grants are no longer available, the program must rely solely on origination fees and State funds. Spending such funds is subject to approval of the Wyoming Legislature, although federal restrictions will limit use of these funds to purposes related to this program.

FY2011 DWSRF Projected Environmental Results

1. At the end of FY2009, the Wyoming fund utilization rate was 83%, up from its FY08 rate of 80%, and below the national average of 87%. In FY2011, we intend to increase the fund utilization rate to 87% to meet the national average.

2. In FY2009, the rate at which projects progressed as measured by disbursements as a percent of assistance provided was 72%. In FY2011, we intend to increase this construction pace to 80%.

3. In FY2011, the DWSRF intends to fund 20 drinking water SRF assistance agreements, totaling $40 million, and serving a combined population of 200,000.

4. In FY2011, 15 projects are estimated to initiate operations.

5. In FY2011, the DWSRF program intends to fund one water efficiency project which will install water meters to encourage conservation of the potable water supply and one water efficiency project which will replace excessively leaking mains to conserve potable water.
<table>
<thead>
<tr>
<th>Project</th>
<th>Rank</th>
<th>Rank Points</th>
<th>Population</th>
<th>Owner</th>
<th>PWS No</th>
<th>Description</th>
<th>Amount ($1,000)</th>
<th>Green Type</th>
<th>Green Amount ($1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kemmerer- Diamondville JPB Water Treatment Plant</td>
<td>1</td>
<td>189</td>
<td>3367</td>
<td>Kemmerer- Diamondville JPB</td>
<td>WY5600028</td>
<td>Turbidity violation and boil order 3/07. SWTR violation 3/07. Treatment equipment deteriorated and nearing end useful life. No filter to waste capability. Construct new treatment facilities. DWSRF loan has been made.</td>
<td>$1,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lance Creek Water District</td>
<td>2</td>
<td>114</td>
<td>40</td>
<td>Lance Creek W&amp;S District</td>
<td>WY5600109</td>
<td>Upgrade treatment or develop new source to comply with new arsenic MCL. Arsenic violation 9/07. TCR violations 7/09, 8/09, and 9/09. EPA Administrative Orders 6/08 and 12/09. Replace existing deteriorated storage. Chlorination system.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hudson Treatment or New Source</td>
<td>3</td>
<td>105</td>
<td>407</td>
<td>Hudson, Town of</td>
<td>WY5600183</td>
<td>Wellfield is under direct influence of surface water. Build treatment plant or construct transmission line from Lander. 1/06 SWTR violation. 6/06 EPA Administrative Order. Need to meet LT2ESWTR.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LaBarge Treatment Upgrades and/or New Well</td>
<td>4</td>
<td>102</td>
<td>431</td>
<td>LaBarge, Town of</td>
<td>WY5600222</td>
<td>Well is GWUDI. SWTR violation - failure to filter. EPA Administrative Order 4/08. Need to meet LT2ESWTR. New well(s) and/or upgrade treatment to include pretreatment, filtration, and disinfection processes. Replace/rehabilitate infiltration gallery. DWSRF loan has been made.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairway Estates Treatment or New Source</td>
<td>5</td>
<td>97</td>
<td>100</td>
<td>Fairway Estates I&amp;S District</td>
<td>WY5600918</td>
<td>Upgrade treatment, develop new source, or connect to Dougas system, to comply with new arsenic MCL. TCR violations 9/06, 6/08, and 10/08. EPA Administrative Order 5/08.</td>
<td>$868</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guernsey Distribution and Storage Upgrades</td>
<td>6</td>
<td>92</td>
<td>1147</td>
<td>Guernsey, Town of</td>
<td>WY560023</td>
<td>Line replacements, extensions, looping. Asbestos cement lines, lead goosenecks, dead-end lines, iron cement lines, low pressures. New storage tank. Storage tank rehabilitation. New transmission from wells to tank. Old, deteriorated infrastructure increases cross contamination potential. TCR violations 8/09 and 9/09.</td>
<td>$2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambria I&amp;S District</td>
<td>7</td>
<td>87</td>
<td>165</td>
<td>Cambria I&amp;S District</td>
<td>WY5601028</td>
<td>System upgrades to comply with EPA Administrative Order issued 3/10 for TCR violations 8/09 and 10/09.</td>
<td>$500</td>
<td></td>
<td></td>
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<tr>
<td>Fort Laramie</td>
<td>8</td>
<td>81</td>
<td>243</td>
<td>Fort Laramie, Town of</td>
<td>WY5600185</td>
<td>Well, storage, distribution, and transmission improvements. TCR violation 8/08. EPA Administrative Order 7/09.</td>
<td>$1,000</td>
<td></td>
<td></td>
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<tr>
<td>Rock River Treatment</td>
<td>9</td>
<td>76</td>
<td>235</td>
<td>Rock River, Town of</td>
<td>WY5600048</td>
<td>Treatment upgrades. HAA5 violations 2008 and 2009. SWTR violations 1/08 and 10/09. EPA Administrative Order 6/09.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manville Treatment or New Source</td>
<td>10</td>
<td>75</td>
<td>101</td>
<td>Manville, Town of</td>
<td>WY5600110</td>
<td>Upgrade treatment or develop new source to comply with uranium MCL.</td>
<td>$150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Granger</td>
<td>11</td>
<td>72</td>
<td>146</td>
<td>Granger, Town of</td>
<td>WY5600020</td>
<td>Aged filter system encourages bacteria growth - replace. Need to meet LT2ESWTR. Treatment upgrades. Water line looping. Install meters on services. Valve replacements. Storage, transmission, and distribution improvements.</td>
<td>$1,000 WC</td>
<td>WC</td>
<td>$50</td>
</tr>
<tr>
<td>Evansville Distribution Improvements</td>
<td>12</td>
<td>71</td>
<td>2255</td>
<td>Evansville, Town of</td>
<td>WY5600018</td>
<td>TCR violation 8/07. Replace old, deteriorated waterlines and appurtenances (cross contamination potential).</td>
<td>$12,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
</tr>
<tr>
<td>----------------------------------------------</td>
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<td>-------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>South Torrington WSD Main Replacements</td>
<td>13</td>
<td>70</td>
<td>650</td>
<td>South Torrington W&amp;S District</td>
<td>WY5600168</td>
<td>Replace old, deteriorated and undersized water lines (cross contamination potential). TCR violation 7/06.</td>
<td>$250</td>
<td></td>
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<tr>
<td>Wheatland Main Replacements</td>
<td>14</td>
<td>67</td>
<td>3548</td>
<td>Wheatland, Town of</td>
<td>WY5600187</td>
<td>Replacement of undersized and leaking mains (cross contamination potential). Main extensions and looping. TCR violations 1/07 and 12/08.</td>
<td>$480</td>
<td></td>
<td></td>
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<tr>
<td>Alpine Main Replacements</td>
<td>15</td>
<td>62</td>
<td>550</td>
<td>Alpine, Town of</td>
<td>WY5600156</td>
<td>Replace mains with a high incidence of breaks (cross contamination potential). TCR 8/06</td>
<td>$580</td>
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<td></td>
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<tr>
<td>LaGrange Treatment Upgrades or New Source</td>
<td>16</td>
<td>61</td>
<td>332</td>
<td>LaGrange, Town of</td>
<td>WY5600788</td>
<td>Upgrade treatment or develop new source to comply with new arsenic MCL.</td>
<td>$200</td>
<td></td>
<td></td>
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<tr>
<td>Manville Distribution Improvements</td>
<td>17</td>
<td>55</td>
<td>101</td>
<td>Manville, Town of</td>
<td>WY5600110</td>
<td>Replace old, deteriorated, and undersized mains and distribution appurtenances (cross contamination potential). Loop dead end mains. Replace old well pump. DWSRF loan has been made.</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farview Water District</td>
<td>18</td>
<td>55</td>
<td>31</td>
<td>Far View W&amp;S District</td>
<td>WY5601546</td>
<td>New supply well, new storage, water main looping. Existing wells do not meet secondary drinking water standards for total dissolved solids, sodium, and sulfates. TCR violations 8/08 and 9/08.</td>
<td>$250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riverton Treatment Upgrades</td>
<td>19</td>
<td>52</td>
<td>9310</td>
<td>Riverton, City of</td>
<td>WY5600047</td>
<td>Treatment upgrades to meet LT2ESWTR.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm Springs Water District</td>
<td>20</td>
<td>52</td>
<td>120</td>
<td>Warm Springs Water District</td>
<td>WY5600861</td>
<td>Upgrade treatment or develop new source to comply with new arsenic MCL.</td>
<td>$200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centennial W&amp;S District New Source</td>
<td>21</td>
<td>52</td>
<td>100</td>
<td>Centennial W&amp;S District</td>
<td>WY5601232</td>
<td>Develop new source to comply with new arsenic MCL.</td>
<td>$600</td>
<td></td>
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</tr>
<tr>
<td>Sundance Meadows Water District</td>
<td>22</td>
<td>51</td>
<td>50</td>
<td>Sundance Meadows Water District</td>
<td>WY5601546</td>
<td>Subdivision south of Douglas. Failing wells. Uranium over MCL. Coliform positive. Construct transmission line to connect to Douglas system. Construct distribution system. DWSRF loan has been made.</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan WTP Upgrades for LT2ESWTR Requirements</td>
<td>23</td>
<td>50</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Secondary removal/disinfection process for cryptosporidium to meet requirements of Long Term 2 Enhanced Surface Water Treatment Rule. Treatment for seasonal taste and odor issues.</td>
<td>$6,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan/SAWS Big Goose WTP Upgrades for LT2ESWTR Requirements</td>
<td>24</td>
<td>50</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Secondary removal/disinfection process for cryptosporidium to meet requirements of Long Term 2 Enhanced Surface Water Treatment Rule. Treatment for seasonal taste and odor issues. Joint project of City of Sheridan (PWS 5600052) and SAWS (PWS 5601244).</td>
<td>$3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan Water Main Replacements</td>
<td>25</td>
<td>50</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Replace old, deteriorated, and undersized water mains (cross contamination potential). DWSRF loans have been made. total need $19.3M, likely application $3M.</td>
<td>$3,000</td>
<td></td>
<td></td>
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<tr>
<td>Reliance Water System Upgrades</td>
<td>26</td>
<td>47</td>
<td>30516</td>
<td>Green River - Rock Springs - Sweetwater Co JPWB</td>
<td>WY5600050</td>
<td>Replace old, deteriorated, and undersized mains and storage tank (cross contamination potential). Looping and extensions. Inadequate pressure.</td>
<td>$4,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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</tr>
<tr>
<td>Rawlins Treatment Upgrades</td>
<td>27</td>
<td>47</td>
<td>9006</td>
<td>Rawlins, City of</td>
<td>WY5600045</td>
<td>Treatment upgrades to meet LT2ESWTR.</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teton Village Water Supply and Storage</td>
<td>28</td>
<td>47</td>
<td></td>
<td>Teton Village W&amp;S District</td>
<td>WY5600218</td>
<td>Construct new water supply wells, storage, and water transmission pipelines. DWSRF loan made for first phase including wells, transmission, and design.</td>
<td>$2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lyman Treatment Upgrades or New Source</td>
<td>29</td>
<td>47</td>
<td>1938</td>
<td>Lyman, Town of</td>
<td>WY5600033</td>
<td>Upgrade treatment or develop new source to comply with new arsenic MCL.</td>
<td>$200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinedale UV Disinfection</td>
<td>30</td>
<td>47</td>
<td>1412</td>
<td>Pinedale, Town of</td>
<td>WY5600041</td>
<td>UV disinfection system to meet LT2ESWTR. DWSRF loan has been made.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dayton Treatment Upgrades</td>
<td>31</td>
<td>47</td>
<td>689</td>
<td>Dayton, Town of</td>
<td>WY5600202</td>
<td>Treatment upgrades to meet LT2ESWTR.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skyline Ranch I&amp;S District</td>
<td>32</td>
<td>47</td>
<td>160</td>
<td>Skyline Ranch I&amp;S District</td>
<td>WY5600217</td>
<td>Upgrade treatment or develop new source to comply with new arsenic MCL.</td>
<td>$200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lingle Well</td>
<td>33</td>
<td>45</td>
<td>510</td>
<td>Lingle, Town of</td>
<td>WY5600030</td>
<td>Additional well. Existing wells showing decrease in quality. TCR violation 11/06. Telemetry system for wells.</td>
<td>$250</td>
<td></td>
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<tr>
<td>Osage Main Replacements</td>
<td>34</td>
<td>45</td>
<td>215</td>
<td>Osage Water District</td>
<td>WY5600038</td>
<td>Replace old, deteriorated water mains (cross contamination potential).</td>
<td>$2,152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casper Miscellaneous Water Main Replacements</td>
<td>35</td>
<td>44</td>
<td>49644</td>
<td>Casper, City of</td>
<td>WY5601415</td>
<td>Replacement/slip lining of old, undersized, and unlined cast iron mains (cross contamination potential) and lead service lines. Some areas do not meet 35 psi pressure requirement. DWSRF loan has been made.</td>
<td>$5,000</td>
<td></td>
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<tr>
<td>Jamestown-Rio Vista</td>
<td>36</td>
<td>44</td>
<td>552</td>
<td>Jamestown-Rio Vista W&amp;S District</td>
<td>WY5600810</td>
<td>Existing treatment plant near end useful life. Treatment upgrades or connect to Green River-Rock Springs Regional System. Replace deteriorated and undersized distribution lines. Rehabilitate existing tank and/or construct new tank to supplement/replace undersized existing tank.</td>
<td>$1,500</td>
<td></td>
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<tr>
<td>Rock Springs Water Main Replacements</td>
<td>37</td>
<td>37</td>
<td>18708</td>
<td>Rock Springs, City of</td>
<td>WY5601182</td>
<td>Replace old, deteriorated, and undersized mains and services (cross contamination potential). Replace lead services.</td>
<td>$1,500</td>
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<tr>
<td>Hulett Main Replacements</td>
<td>38</td>
<td>36</td>
<td>408</td>
<td>Hulett, Town of</td>
<td>WY5600026</td>
<td>Replace old, deteriorated, undersized water lines (cross contamination potential). Extensions. DWSRF loan has been made.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ten Sleep Distribution Upgrades</td>
<td>39</td>
<td>36</td>
<td>304</td>
<td>Ten Sleep, Town of</td>
<td>WY5600203</td>
<td>Replace leaking water mains (cross contamination potential). Extend service to adjacent areas with insufficient supply.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cook Road Water District</td>
<td>40</td>
<td>36</td>
<td>255</td>
<td>Cook Road Water District</td>
<td>WY5601399</td>
<td>New well and transmission. Existing well failing, pumping sand and gas, and production declined dramatically resulting in water shortages.</td>
<td>$430</td>
<td></td>
<td></td>
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<tr>
<td>Laramie Distribution Upgrades</td>
<td>41</td>
<td>35</td>
<td>27204</td>
<td>Laramie, City of</td>
<td>WY5600029</td>
<td>Replace old deteriorated waterlines (cross contamination potential). Waterline extensions and looping. $2.5M/yr for several years. DWSRF loan has been made.</td>
<td>$2,500</td>
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<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Sheridan/SAWS New Big Goose Storage</td>
<td>42</td>
<td>35</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Construct new treated water storage tank and transmission at Big Goose Treatment Plant to meet system demands. Joint project of City of Sheridan (PWS 5600052) and SAWS (PWS 5601244).</td>
<td>$733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powell Main Replacements</td>
<td>43</td>
<td>35</td>
<td>5373</td>
<td>Powell, City of</td>
<td>WY5600042</td>
<td>Replace old and undersized water mains (cross contamination potential). New transmission.</td>
<td>$1,000</td>
<td></td>
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</tr>
<tr>
<td>Buffalo Distribution Replacements</td>
<td>44</td>
<td>35</td>
<td>3900</td>
<td>Buffalo, Town of</td>
<td>WY5600005</td>
<td>Replace old, deteriorated, and undersized distribution lines (cross contamination potential).</td>
<td>$624</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeteteetse Distribution Improvements</td>
<td>45</td>
<td>35</td>
<td>351</td>
<td>Meeteteetse, Town of</td>
<td>WY5600035</td>
<td>Replace old, deteriorated, undersized water mains (cross contamination potential). DWSRF loan has been made.</td>
<td>$500</td>
<td></td>
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</tr>
<tr>
<td>Burlington</td>
<td>46</td>
<td>35</td>
<td>250</td>
<td>Burlington, Town of</td>
<td>WY5601098</td>
<td>Replace old, deteriorated water mains (cross contamination potential). Distribution system extensions. New tank.</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North End Water Supply</td>
<td>47</td>
<td>34</td>
<td>500</td>
<td>North End Water Users</td>
<td>WY5600043</td>
<td>Nitrates exceeded MCL in some wells in 2008. New wells or connect to another system or add treatment.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Lane Water System Improvements</td>
<td>48</td>
<td>34</td>
<td>200</td>
<td>Red Lane W&amp;S District</td>
<td>WY5600232</td>
<td>Replace old, deteriorated water lines (cross contamination potential).</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chugwater Main Replacements</td>
<td>49</td>
<td>33</td>
<td>244</td>
<td>Chugwater, Town of</td>
<td>WY5600200</td>
<td>Replace old deteriorated water mains (cross contamination potential).</td>
<td>$40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fremont County Fair &amp; Rodeo Distribution Improvements</td>
<td>50</td>
<td>32</td>
<td>35804</td>
<td>Fremont County</td>
<td>WY5600047</td>
<td>Replace old, deteriorated, and undersized water lines (cross contamination potential). Extend mains and services to additional areas/buildings.</td>
<td>$142</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riverton Distribution Improvements</td>
<td>51</td>
<td>32</td>
<td>9310</td>
<td>Riverton, City of</td>
<td>WY5600047</td>
<td>Projects to replace old undersized booster station and water mains (cross contamination potential) and add looping water lines to remove dead ends. Areas include Riverview Terrace and Riverbend Subdivisions in south Riverton, Logan Park Subdivisions in north Riverton, the North Riverton W&amp;S (PWS# WY5600173), and main booster station. DWSRF loan has been made.</td>
<td>$2,000</td>
<td></td>
<td></td>
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<tr>
<td>Jackson Storage Tanks</td>
<td>52</td>
<td>32</td>
<td>8647</td>
<td>Jackson, Town of</td>
<td>WY5600213</td>
<td>Replace old, deteriorated, undersized tanks with new tanks.</td>
<td>$500</td>
<td></td>
<td></td>
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<tr>
<td>Lovell Main Replacements</td>
<td>53</td>
<td>32</td>
<td>2361</td>
<td>Lovell, Town of</td>
<td>WY5600031</td>
<td>Replace deteriorated, leaking, and undersized water mains (cross contamination potential).</td>
<td>$2,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dubois</td>
<td>54</td>
<td>32</td>
<td>962</td>
<td>Dubois, Town of</td>
<td>WY5600177</td>
<td>Replace old distribution lines (cross contamination potential) and loop water lines. New well, storage, transmission, well upgrades.</td>
<td>$2,000</td>
<td></td>
<td></td>
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<tr>
<td>Encampment Main Replacements</td>
<td>55</td>
<td>32</td>
<td>443</td>
<td>Encampment, Town of</td>
<td>WY5600060</td>
<td>Replace old, deteriorated, and undersized distribution lines (cross contamination potential). DWSRF loan has been made.</td>
<td>$500</td>
<td></td>
<td></td>
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<tr>
<td>Baggs Distribution and Transmission Upgrades</td>
<td>56</td>
<td>32</td>
<td>348</td>
<td>Baggs, Town of</td>
<td>WY5600058</td>
<td>Replace old, corroded, and undersized mains (cross contamination potential). Loop dead ends.</td>
<td>$500</td>
<td></td>
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<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Wamsutter Replacements</td>
<td>57</td>
<td>31</td>
<td>261</td>
<td>Wamsutter, Town of</td>
<td>WY5600105</td>
<td>News wells and transmission to replace old deteriorated wells (cross contamination potential). Replace old deteriorated mains (cross contamination potential). Plug and/or remove old system components.</td>
<td>$1,400</td>
<td></td>
<td></td>
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<tr>
<td>Rock River Transmission</td>
<td>58</td>
<td>31</td>
<td>235</td>
<td>Rock River, Town of</td>
<td>WY5600048</td>
<td>Replace deteriorated transmission main (cross contamination potential).</td>
<td>$1,000</td>
<td></td>
<td></td>
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<tr>
<td>People's I&amp;S District</td>
<td>59</td>
<td>31</td>
<td>135</td>
<td>People's I&amp;S District</td>
<td>WY5600898</td>
<td>Source well is anticipated to fail because of age and inferior pipe materials (cross contamination potential). DWSRF loan has been made.</td>
<td>$120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albin</td>
<td>60</td>
<td>31</td>
<td>120</td>
<td>Albin, Town of</td>
<td>WY5600189</td>
<td>Cross-contamination potential in deteriorated mains. Transmission and distribution system improvements. New wells and well rehabilitation.</td>
<td>$300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manderson Tank and Mains</td>
<td>61</td>
<td>31</td>
<td>104</td>
<td>Manderson, Town of</td>
<td>WY5600204</td>
<td>Replace old storage tank. Replace old, deteriorated water lines. Cross contamination potential.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torrington Water Line Replacement</td>
<td>62</td>
<td>30</td>
<td>5776</td>
<td>Torrington, City of</td>
<td>WY5600164</td>
<td>Replace old, deteriorated, and undersized water lines (cross contamination potential).</td>
<td>$340</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mills Distribution Upgrades</td>
<td>63</td>
<td>30</td>
<td>2591</td>
<td>Mills, Town of</td>
<td>WY5600036</td>
<td>Replace old, deteriorated and undersized water lines (cross contamination potential). Emergency generator at booster pump station.</td>
<td>$2,054</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine Bluffs Mains</td>
<td>64</td>
<td>30</td>
<td>1153</td>
<td>Pine Bluffs, Town of</td>
<td>WY5600040</td>
<td>Replace old, deteriorated, and undersized mains (cross contamination potential).</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upton Water Line Replacements</td>
<td>65</td>
<td>30</td>
<td>872</td>
<td>Upton, Town of</td>
<td>WY5600140</td>
<td>Replace old, undersized water mains (cross contamination potential). DWSRF loan has been made.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Laramie WSD Alternate Water Source</td>
<td>66</td>
<td>30</td>
<td>689</td>
<td>South of Laramie W&amp;S District</td>
<td>WY5601393</td>
<td>Drill new water well as back up water source or construct redundant supply connection. Main supply is City of Laramie. Supply is through a single main with a history of breaks due to corrosion problems (cross contamination potential).</td>
<td>$1,000</td>
<td></td>
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<tr>
<td>Midwest Distribution Upgrades</td>
<td>67</td>
<td>30</td>
<td>408</td>
<td>Midwest, Town of</td>
<td>WY5600201</td>
<td>Replace corroded, failing water service saddles and old deteriorated mains (cross contamination potential).</td>
<td>$1,100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hudson Distribution, Storage, and Well Upgrades</td>
<td>68</td>
<td>30</td>
<td>407</td>
<td>Hudson, Town of</td>
<td>WY5600183</td>
<td>New replacement wells adjacent to existing wells that are old and deteriorated. Wells are also losing production and unable to meet peak demands. New storage tank to replace existing undersized tank. Replace old, deteriorated mains (cross contamination potential). Looping and extensions.</td>
<td>$1,000</td>
<td></td>
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</tr>
<tr>
<td>Deaver Water Main Improvements</td>
<td>69</td>
<td>30</td>
<td>177</td>
<td>Deaver, Town of</td>
<td>WY5600016</td>
<td>Replace old, deteriorated, undersized water mains (cross contamination potential).</td>
<td>$2,693</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheyenne Main Rehabilitation and Replacements</td>
<td>70</td>
<td>29</td>
<td>53011</td>
<td>Cheyenne, City of</td>
<td>WY5600011</td>
<td>Replace or rehabilitate old, deteriorated, and undersized water mains (cross contamination potential). Various DWSRF loans have been made.</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cody Main Replacements</td>
<td>71</td>
<td>29</td>
<td>8835</td>
<td>Cody, City of</td>
<td>WY5600207</td>
<td>Replace old, undersized water mains (cross contamination potential).</td>
<td>$100</td>
<td></td>
<td></td>
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<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Douglas Water Line Replacements</td>
<td>72</td>
<td>29</td>
<td>5288</td>
<td>Douglas, City of</td>
<td>WY5600137</td>
<td>Replace old, failing, and undersized water mains (cross contamination potential).</td>
<td>$1,361</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moorcroft Distribution Improvements</td>
<td>73</td>
<td>29</td>
<td>807</td>
<td>Moorcroft, Town of</td>
<td>WY5600037</td>
<td>Replace old, deteriorated, undersized water mains and distribution appurtenances (cross contamination potential). Loop water lines. Meters.</td>
<td>$1,250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dixon</td>
<td>74</td>
<td>28</td>
<td>79</td>
<td>Dixon, Town of</td>
<td>WY5600059</td>
<td>Membrane fouling. Add pretreatment. Treatment upgrades or new source. HAAS violation 9/09.</td>
<td>$250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green River - Rock Springs - Sweetwater Co JPWB Pre-sedimentation</td>
<td>75</td>
<td>27</td>
<td>30516</td>
<td>Green River - Rock Springs - Sweetwater Co JPWB</td>
<td>WY5600050</td>
<td>Construct pre-sedimentation basin or raw water reservoir to reduce peak solids loading to the clarifiers. Miscellaneous system improvements. Green River (water source) subject to rapidly changing high turbidity events beyond capacity of plant.</td>
<td>$14,500</td>
<td></td>
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</tr>
<tr>
<td>Sheridan County Fairgrounds Distribution Upgrades</td>
<td>76</td>
<td>27</td>
<td>26560</td>
<td>Sheridan County</td>
<td>WY5600052</td>
<td>Replace old, deteriorated, and undersized water mains (cross contamination potential).</td>
<td></td>
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<tr>
<td>Gillette Distribution Upgrades</td>
<td>77</td>
<td>27</td>
<td>19646</td>
<td>Gillette, City of</td>
<td>WY5600019</td>
<td>Replace old, deteriorated, and undersized water distribution lines (cross contamination potential). Upgrade existing pump station to increase capacity. Add booster station to area with current low pressure complaints.</td>
<td>$13,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green River Distribution and Storage Upgrades</td>
<td>78</td>
<td>27</td>
<td>11808</td>
<td>Green River, City of</td>
<td>WY5601181</td>
<td>Distribution lines - age, dead ends, undersized, corrosion, sedimentation, hydrocarbon contamination, leaking sewer lines, cross contamination potential. Additional storage.</td>
<td>$3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lander Water Main Replacements and Extensions</td>
<td>79</td>
<td>27</td>
<td>6887</td>
<td>Lander, City of</td>
<td>WY5600176</td>
<td>Replace leaking water mains (cross contamination potential). Extensions to nearby districts using shallow wells that have potential for contamination.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worland Transmission Replacement</td>
<td>80</td>
<td>27</td>
<td>5250</td>
<td>Worland, City of</td>
<td>WY5600197</td>
<td>Replace existing East Artesian Transmission Line with new 3 mile 24&quot; pipeline. Replace deteriorated water lines. Deteriorated infrastructure increases cross contamination potential.</td>
<td>$2,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thermopolis Mains and Tank</td>
<td>81</td>
<td>27</td>
<td>3172</td>
<td>Thermopolis, Town of</td>
<td>WY5600056</td>
<td>Replace old water lines. Replace old storage tank. New storage tanks, booster, and transmission.</td>
<td>$1,000</td>
<td></td>
<td></td>
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<tr>
<td>Star Valley Ranch Distribution Improvements</td>
<td>82</td>
<td>27</td>
<td>2000</td>
<td>Star Valley Ranch, Town of</td>
<td>WY5600287</td>
<td>Replace old, deteriorated, and undersized water lines (cross contamination potential). Some main replacements qualify as &quot;green&quot; due to documented excessive leakage.</td>
<td>$10,000</td>
<td>WB</td>
<td>$3,200</td>
</tr>
<tr>
<td>Greybull Water Mains</td>
<td>83</td>
<td>27</td>
<td>1815</td>
<td>Greybull, Town of</td>
<td>WY5600022</td>
<td>Replace old, deteriorated, leaking distribution lines (cross contamination potential). DWSRF loan has been made.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinedale Distribution Upgrades</td>
<td>84</td>
<td>27</td>
<td>1412</td>
<td>Pinedale, Town of</td>
<td>WY5600041</td>
<td>Upgrade aging, corroded and undersized lines (cross contamination potential). DWSRF loan has been made.</td>
<td>$4,100</td>
<td></td>
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<tr>
<td>Ranchester Treatment or Source</td>
<td>85</td>
<td>27</td>
<td>701</td>
<td>Ranchester, Town of</td>
<td>WY5600044</td>
<td>Existing treatment plant has trouble meeting SWTR. Treatment improvements, or construct transmission main to receive water from Dayton, or relocate intake and construct transmission.</td>
<td>$2,000</td>
<td></td>
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</tr>
<tr>
<td>Ranchester Main Replacements</td>
<td>86</td>
<td>27</td>
<td>701</td>
<td>Ranchester, Town of</td>
<td>WY5600044</td>
<td>Replace old, deteriorated, undersized water mains (cross contamination potential).</td>
<td>$120</td>
<td></td>
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<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Pioneer Transmission Replacements</td>
<td>87</td>
<td>27</td>
<td>495</td>
<td>Pioneer W&amp;S District</td>
<td>WY5600828</td>
<td>Replace old, deteriorated transmission mains that have had recent leaks requiring emergency repairs (cross contamination potential).</td>
<td>$750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Means W&amp;S District</td>
<td>88</td>
<td>27</td>
<td>300</td>
<td>Means W&amp;S District</td>
<td>WY5600760</td>
<td>Existing wells failing (cross contamination potential), supply limited. Construct new well and transmission or connect to Gillette.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elk Mountain</td>
<td>89</td>
<td>27</td>
<td>192</td>
<td>Elk Mountain, Town of</td>
<td>WY5600065</td>
<td>Add an artesion well, add water treatment and pump control building, transmission line expansion, distribution extensions, replace old deteriorated tanks and distribution mains (cross contamination potential).</td>
<td>$3,000</td>
<td></td>
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</tr>
<tr>
<td>Yoder Wells</td>
<td>90</td>
<td>27</td>
<td>169</td>
<td>Yoder, Town of</td>
<td>WY5600169</td>
<td>Exceed uranium MCL 12/07 and gross alpha MCL 3/08. New source and/or treatment.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newcastle Chlorination and Distribution Upgrades</td>
<td>91</td>
<td>25</td>
<td>3249</td>
<td>Newcastle, City of</td>
<td>WY5600256</td>
<td>New chlorination system. Replace deteriorated waterlines (cross contamination potential).</td>
<td>$300</td>
<td></td>
<td></td>
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<tr>
<td>Glenrock Distillation Improvements</td>
<td>92</td>
<td>25</td>
<td>2231</td>
<td>Glenrock, Town of</td>
<td>WY5600199</td>
<td>Replace old, deteriorated water mains (cross contamination potential).</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lusk Main Replacements</td>
<td>93</td>
<td>25</td>
<td>1447</td>
<td>Lusk, Town of</td>
<td>WY5600032</td>
<td>Replace old, deteriorated water lines and services (cross contamination potential). Mains regularly break.</td>
<td>$1,100</td>
<td></td>
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<tr>
<td>Shoshoni Water Line Replacements</td>
<td>94</td>
<td>25</td>
<td>635</td>
<td>Shoshoni, Town of</td>
<td>WY5600053</td>
<td>Replace old, deteriorated water lines (cross contamination potential).</td>
<td>$2,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thayne</td>
<td>95</td>
<td>25</td>
<td>341</td>
<td>Thayne, Town of</td>
<td>WY5600159</td>
<td>Replace deteriorated waterlines and tank. Deteriorated infrastructure increases cross contamination potential. Increase storage.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burns Main Replacements</td>
<td>96</td>
<td>25</td>
<td>285</td>
<td>Burns, Town of</td>
<td>WY5600188</td>
<td>Replace old, deteriorated water mains. Watermain looping.</td>
<td>$200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicine Bow Water Line Replacements</td>
<td>97</td>
<td>25</td>
<td>274</td>
<td>Medicine Bow, Town of</td>
<td>WY5600034</td>
<td>Replace old, deteriorated distribution and transmission lines (cross contamination potential).</td>
<td>$2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osage Distribution Extensions</td>
<td>98</td>
<td>25</td>
<td>215</td>
<td>Osage Water District</td>
<td>WY5600038</td>
<td>Extend distribution mains to areas that currently do not have service.</td>
<td>$250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheyenne Round Top Tank</td>
<td>99</td>
<td>24</td>
<td>53011</td>
<td>Cheyenne, City of</td>
<td>WY5600011</td>
<td>New 5MG water storage tank and mains at Round Top Treatment Plant to replace old deteriorated tank (cross contamination potential).</td>
<td>$7,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casper 10 MG Tank Rehabilitation</td>
<td>100</td>
<td>24</td>
<td>49644</td>
<td>Casper, City of</td>
<td>WY5601415</td>
<td>Rehabilitate old, deteriorated, 10 million gallon finished water storage reservoir (cross contamination potential).</td>
<td>$5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kemmerer-Diamondville Tanks and Transmission</td>
<td>101</td>
<td>24</td>
<td>3367</td>
<td>Kemmerer-Diamondville</td>
<td>JPB</td>
<td>Construct new and rehabilitate existing transmission, storage, and pumping. Deteriorated infrastructure increases cross contamination potential.</td>
<td>$2,000</td>
<td></td>
<td></td>
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<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Kemmerer-Diamondville JPB Water Main Replacements</td>
<td>102</td>
<td>24</td>
<td>3367</td>
<td>Kemmerer-Diamondville JPB</td>
<td>WY5600028</td>
<td>Replace old deteriorated water mains (cross contamination potential).</td>
<td>$200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freedom Hills ISD</td>
<td>104</td>
<td>24</td>
<td>400</td>
<td>Freedom Hills I&amp;S District</td>
<td>WY5600789</td>
<td>Install meters, pits, backflow prevention, PRVs, and curbstips on service taps. Area currently unmetered. Install additional gate valves on mains. Upgrade wells sites, including fencing, casing replacement, concrete, and security measures.</td>
<td>$250</td>
<td>WC</td>
<td>$100</td>
</tr>
<tr>
<td>American Road WSD</td>
<td>105</td>
<td>24</td>
<td>250</td>
<td>American Rd W&amp;S District</td>
<td>WY5600968</td>
<td>Replace/rehabilitate corroding tank. Replace transmission and distribution mains and meter pits. Bring system components into compliance with regulations.</td>
<td>$600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Creek I&amp;S District</td>
<td>106</td>
<td>24</td>
<td>100</td>
<td>Spring Creek I&amp;S District</td>
<td>WY5600811</td>
<td>Replace/repair old, deteriorated system components (cross contamination potential); includes storage tank, booster pump stations, chlorine vault, well pumps, electrical and telemetry. Also new well, backup power, flow meters, service meters (&quot;green&quot; component, no existing meters), check valves.</td>
<td>$2,000</td>
<td>WC</td>
<td>$250</td>
</tr>
<tr>
<td>Gillette Tank Rehabilitation</td>
<td>107</td>
<td>22</td>
<td>19646</td>
<td>Gillette, City of</td>
<td>WY560019</td>
<td>Rehabilitate tanks that have corrosion, foundation, and site drainage problems. Add flow control valves and control scheme to better use available storage.</td>
<td>$1,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evanston Distribution and Storage Upgrades</td>
<td>108</td>
<td>22</td>
<td>11507</td>
<td>Evanston, City of</td>
<td>WY5600150</td>
<td>Replace old, deteriorated mains, service saddles, and tanks (cross contamination potential).</td>
<td>$1,100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rawlins Distribution Improvements</td>
<td>109</td>
<td>22</td>
<td>9006</td>
<td>Rawlins, City of</td>
<td>WY5600045</td>
<td>Replace old deteriorated water mains (cross contamination potential). DWSRF loan made.</td>
<td>$1,000</td>
<td></td>
<td></td>
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<tr>
<td>Bridger Valley Waterline Replacement</td>
<td>110</td>
<td>22</td>
<td>5700</td>
<td>Bridger Valley JPB</td>
<td>WY5600757</td>
<td>Replace old deteriorated water mains (cross contamination potential).</td>
<td>$200</td>
<td></td>
<td></td>
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<tr>
<td>Lyman Distribution Upgrades</td>
<td>111</td>
<td>22</td>
<td>1938</td>
<td>Lyman, Town of</td>
<td>WY560033</td>
<td>Replace old, deteriorated mains and services (cross contamination potential).</td>
<td>$220</td>
<td></td>
<td></td>
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<tr>
<td>Saratoga Distribution Replacements</td>
<td>112</td>
<td>22</td>
<td>1726</td>
<td>Saratoga, Town of</td>
<td>WY560061</td>
<td>Replace old, deteriorated mains (cross contamination potential).</td>
<td>$2,500</td>
<td></td>
<td></td>
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<tr>
<td>Sundance Storage and Distribution Upgrades</td>
<td>113</td>
<td>22</td>
<td>1161</td>
<td>Sundance, Town of</td>
<td>WY560055</td>
<td>Replace old, deteriorated tanks, mains, and services (cross contamination potential). DWSRF loan has been made for a tank replacement.</td>
<td>$1,000</td>
<td></td>
<td></td>
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<tr>
<td>Cowley Main Replacements</td>
<td>114</td>
<td>22</td>
<td>560</td>
<td>Cowley, Town of</td>
<td>WY5600206</td>
<td>Replace old, deteriorated water mains (cross contamination potential).</td>
<td>$1,100</td>
<td></td>
<td></td>
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<tr>
<td>Sinclair Water Main Replacements</td>
<td>115</td>
<td>22</td>
<td>423</td>
<td>Sinclair, Town of</td>
<td>WY560054</td>
<td>Replace old, deteriorated water mains (cross contamination potential).</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Rafter J &amp; S District Water Line Replacements</td>
<td>116</td>
<td>22</td>
<td>400</td>
<td>Rafter J &amp; S District</td>
<td>WY5600822</td>
<td>Replace old, deteriorated mains and services (cross contamination potential). DWSRF loan has been made.</td>
<td>$300</td>
<td></td>
<td></td>
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<tr>
<td>Vista West ISD</td>
<td>117</td>
<td>22</td>
<td>250</td>
<td>Vista West ISD District</td>
<td>WY5600246</td>
<td>Replace deteriorated tank that has history of leaks. Replace well controls</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Countryside Water Users</td>
<td>118</td>
<td>22</td>
<td>200</td>
<td>Countryside Water Users</td>
<td>WY5600192</td>
<td>New well. Existing well old and deteriorated (cross contamination potential); well producing sand.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Thermopolis</td>
<td>119</td>
<td>22</td>
<td>112</td>
<td>South Thermopolis</td>
<td>WY5601083</td>
<td>Low water pressures (&lt;35 psi). New water tank location, pump station, PRVs, and transmission. New and replacement water mains.</td>
<td>$1,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poison Spider Distribution Improvements</td>
<td>120</td>
<td>22</td>
<td>100</td>
<td>Poison Spider</td>
<td>WY5600073</td>
<td>Replace old, deteriorated distribution mains and appurtenances (cross contamination potential).</td>
<td>$750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glendo Well and Transmission</td>
<td>121</td>
<td>21</td>
<td>229</td>
<td>Glendo, Town of</td>
<td>WY5600231</td>
<td>New well and transmission main.</td>
<td>$300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casper Zone IV Improvements</td>
<td>122</td>
<td>19</td>
<td>49644</td>
<td>Casper, City of</td>
<td>WY5601415</td>
<td>Additional water storage and transmission lines in zone IV.</td>
<td>$330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riverton Wells and Storage</td>
<td>123</td>
<td>17</td>
<td>9310</td>
<td>Riverton, City of</td>
<td>WY5600047</td>
<td>New well, tank, and transmission for area needing additional capacity.</td>
<td>$2,141</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Valley &amp; Crossed Arrows Improvement District</td>
<td>124</td>
<td>17</td>
<td>64</td>
<td>Big Valley &amp; Crossed Arrows &amp; S District</td>
<td>WY5601193</td>
<td>Connect to Town of Meeteetse system by constructing 1.5 mile transmission main, or find other new source. Existing well high TDS (1400 ppm). Lack of storage. Transmission, distribution and storage upgrades.</td>
<td>$750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evansville Treatment Upgrades</td>
<td>125</td>
<td>16</td>
<td>2255</td>
<td>Evansville, Town of</td>
<td>WY5600018</td>
<td>Treatment plant nearing capacity; expand plant.</td>
<td>$3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laramie Source and Transmission Improvements</td>
<td>126</td>
<td>15</td>
<td>27204</td>
<td>Laramie, City of</td>
<td>WY5600029</td>
<td>Raw water transmission line to treatment plant. Develop well field. Raw water irrigation. New transmission and transmission upgrades.</td>
<td>$5,000 WC</td>
<td>C</td>
<td>$1,000</td>
</tr>
<tr>
<td>Shoshoni Tank</td>
<td>127</td>
<td>15</td>
<td>635</td>
<td>Shoshoni, Town of</td>
<td>WY5600053</td>
<td>Additional storage tank. Current storage is insufficient.</td>
<td>$1,000</td>
<td></td>
<td></td>
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<tr>
<td>Burns Wells and Storage</td>
<td>128</td>
<td>15</td>
<td>285</td>
<td>Burns, Town of</td>
<td>WY5600188</td>
<td>New wells, storage, transmission.</td>
<td>$600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chugwater Misc. Improvements</td>
<td>129</td>
<td>13</td>
<td>244</td>
<td>Chugwater, Town of</td>
<td>WY5600200</td>
<td>New well, emergency generators, SCADA, main extensions, meter replacements.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dixon Transmission Main</td>
<td>130</td>
<td>13</td>
<td>79</td>
<td>Dixon, Town of</td>
<td>WY5600059</td>
<td>Install an isolated transmission line from the water treatment plant to the tank to improve overall water pressure and quality throughout town.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lander Well</td>
<td>131</td>
<td>12</td>
<td>6867</td>
<td>Lander, City of</td>
<td>WY5600176</td>
<td>New well and transmission. Existing supply drought impacted.</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marbleton Tank</td>
<td>132</td>
<td>12</td>
<td>720</td>
<td>Marbleton, Town of</td>
<td>WY5600223</td>
<td>Additional storage. Existing storage inadequate.</td>
<td>$500</td>
<td></td>
<td></td>
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<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Baggs Treatment and Intake upgrades</td>
<td>133</td>
<td>12</td>
<td>348</td>
<td>Baggs, Town of</td>
<td>WY5600058</td>
<td>Membrane fouling; add pretreatment. Inflow problems; improve infiltration gallery.</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evansville Tie to Regional System</td>
<td>134</td>
<td>11</td>
<td>2255</td>
<td>Evansville, Town of</td>
<td>WY5600018</td>
<td>Provide connection to Central Wyoming Regional Water System for future emergency use.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evansville Scott Hill Booster Pump Station</td>
<td>135</td>
<td>11</td>
<td>2255</td>
<td>Evansville, Town of</td>
<td>WY5600018</td>
<td>Upgrade current booster pump station by installing emergency generator, two new pumps, and appurtenances.</td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ten Sleep Tank</td>
<td>136</td>
<td>11</td>
<td>304</td>
<td>Ten Sleep, Town of</td>
<td>WY5600203</td>
<td>Town currently does not have a tank. Install tank.</td>
<td>$700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wamsutter Looping and Extensions</td>
<td>137</td>
<td>11</td>
<td>261</td>
<td>Wamsutter, Town of</td>
<td>WY5600105</td>
<td>Looping water mains under I-80 to improve reliability. Extend distribution to areas without current service.</td>
<td>$1,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Horn Regional Supply</td>
<td>138</td>
<td>10</td>
<td>14000</td>
<td>Big Horn Regional JPB</td>
<td></td>
<td>Provide regional water supply pipelines and wells for communities with limited supplies and in need of redundant transmission mains.</td>
<td>$800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buffalo Transmission</td>
<td>139</td>
<td>10</td>
<td>3900</td>
<td>Buffalo, Town of</td>
<td>WY5600005</td>
<td>Additional transmission main from water treatment plant to increase ability of expanded water treatment plant to deliver design flows to Town.</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buffalo Raw Water Main Replacement</td>
<td>140</td>
<td>10</td>
<td>3900</td>
<td>Buffalo, Town of</td>
<td>WY5600005</td>
<td>Replace failing section of existing raw water main. Raw water is used to irrigate parks, schools, and golf course to save on treatment of potable water.</td>
<td>$150</td>
<td>WC</td>
<td>$150</td>
</tr>
<tr>
<td>Pine Bluffs Well</td>
<td>141</td>
<td>10</td>
<td>1153</td>
<td>Pine Bluffs, Town of</td>
<td>WY5600040</td>
<td>New well and transmission. Quantity problem, some existing wells have gone dry.</td>
<td>$300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upton Well</td>
<td>142</td>
<td>10</td>
<td>872</td>
<td>Upton, Town of</td>
<td>WY5600140</td>
<td>Add well to Town's supply.</td>
<td>$125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoshoni Wells</td>
<td>143</td>
<td>10</td>
<td>635</td>
<td>Shoshoni, Town of</td>
<td>WY5600053</td>
<td>Two new wells to replace two existing wells that have poor quantity/quality.</td>
<td>$800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burlington Treatment</td>
<td>144</td>
<td>10</td>
<td>250</td>
<td>Burlington, Town of</td>
<td>WY5601098</td>
<td>Plant to treat Town's groundwater supply. Town concerned that wells are vulnerable to contamination.</td>
<td>$1,700</td>
<td></td>
<td></td>
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<tr>
<td>Edgerton Distribution Improvements</td>
<td>145</td>
<td>10</td>
<td>169</td>
<td>Edgerton, Town of</td>
<td>WY5600017</td>
<td>Relocate an existing main and loop existing dead end mains.</td>
<td>$280</td>
<td></td>
<td></td>
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<tr>
<td>Lysite WSD</td>
<td>146</td>
<td>10</td>
<td>80</td>
<td>Lysite W&amp;S District</td>
<td></td>
<td>Construct new water supply system including well, transmission, distribution, etc. Currently using inadequate individual wells.</td>
<td>$300</td>
<td></td>
<td></td>
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<tr>
<td>Owl Creek Water District</td>
<td>147</td>
<td>10</td>
<td></td>
<td>Owl Creek Water District</td>
<td></td>
<td>New water system to serve rural areas of Hot Springs County including Sage Valley Subdivision, Mud Creek Basin, Missouri Flats, and Owl Creek Basin. Existing groundwater of poor quality and quantity. Many residents haul drinking water.</td>
<td>$1,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Wyo. Regional Water Radon Treatment</td>
<td>148</td>
<td>9</td>
<td>55000</td>
<td>Central Wyo Regional Water System</td>
<td>WY5600009</td>
<td>Treatment upgrades needed to meet upcoming EPA rule for radon.</td>
<td>$3,000</td>
<td></td>
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</tr>
<tr>
<td>Cheyenne Main Extensions and Upgrades</td>
<td>149</td>
<td>9</td>
<td>53011</td>
<td>Cheyenne, City of</td>
<td>WY5600011</td>
<td>Extend and upsize major water mains ($30 million total over several years and various projects.) DWSRF loans have been made.</td>
<td>$20,000</td>
<td></td>
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<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Central Campbell County ISD</td>
<td>150</td>
<td>9</td>
<td>1600</td>
<td>Central Campbell County ISD</td>
<td>WY5600764</td>
<td>Waterline loop to help with pressure/flow problems.</td>
<td>$50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moorcroft New Well and Transmission</td>
<td>151</td>
<td>9</td>
<td>807</td>
<td>Moorcroft, Town of</td>
<td>WY5600037</td>
<td>New production well and transmission line. DWSRF loan has been made.</td>
<td>$200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moorcroft Distribution Extensions</td>
<td>152</td>
<td>9</td>
<td>807</td>
<td>Moorcroft, Town of</td>
<td>WY5600037</td>
<td>Extend distribution mains to areas currently on inadequate private wells.</td>
<td>$750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine Haven Distribution Improvements</td>
<td>153</td>
<td>9</td>
<td>222</td>
<td>Pine Haven, Town of</td>
<td>WY5600191</td>
<td>Replace undersized mains and loop deadend mains. Improve system reliability and water circulation. DWSRF loan has been made.</td>
<td>$415</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMH Water District</td>
<td>154</td>
<td>9</td>
<td>80</td>
<td>SMH Water District</td>
<td>New system</td>
<td>New distribution system. Connect to Central Wyoming Regional Water System. Individual shallow wells with insufficient water quantity. Some residents hauling water.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan County Airport Distribution Looping</td>
<td>155</td>
<td>7</td>
<td>26560</td>
<td>Sheridan County</td>
<td>WY5600052</td>
<td>Loop distribution mains to address problems of inadequate pressure. DWSRF loan has been made.</td>
<td>$50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gillette Wellfield and Transmission</td>
<td>156</td>
<td>7</td>
<td>19646</td>
<td>Gillette, City of</td>
<td>WY5600019</td>
<td>Insufficient supply for continuing rapid growth. New wellfields and transmission lines. Replace/rehabilitate existing wells. ($221 million total project; $20 million estimated max SRF could potentially fund).</td>
<td>$20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Riverton Improvements</td>
<td>157</td>
<td>7</td>
<td>9310</td>
<td>Riverton, City of</td>
<td>WY5600047</td>
<td>New tank, boosters, and transmission.</td>
<td>$3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lander Meters</td>
<td>158</td>
<td>7</td>
<td>6867</td>
<td>Lander, City of</td>
<td>WY5600176</td>
<td>Replace meters and/or electronic reading system including leak detection capability.</td>
<td>$400</td>
<td>WC</td>
<td>$400</td>
</tr>
<tr>
<td>Star Valley Ranch</td>
<td>159</td>
<td>7</td>
<td>2000</td>
<td>Star Valley Ranch, Town of</td>
<td>WY5600287</td>
<td>Transmission and storage upgrades, redevelop/rehabilitate springs, new booster station, new well.</td>
<td>$2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mohan/WMC Distribution System</td>
<td>160</td>
<td>7</td>
<td>1884</td>
<td>South Douglas Hwy W&amp;S District</td>
<td>New system</td>
<td>New water distribution system (connect to Gillette system). Existing individual wells lack sufficient quantity and have poor quality.</td>
<td>$1,750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guernsey Meters</td>
<td>161</td>
<td>7</td>
<td>1147</td>
<td>Guernsey, Town of</td>
<td>WY5600023</td>
<td>Add automatic meter reading, including leak detection capability, to all water meters.</td>
<td>$160</td>
<td>WC</td>
<td>$160</td>
</tr>
<tr>
<td>Corner Mountain W&amp;S District</td>
<td>162</td>
<td>7</td>
<td>1023</td>
<td>Corner Mountain W&amp;S District</td>
<td>New system</td>
<td>Domestic wells of inadequate water quantity. New well, transmission, tank, and distribution.</td>
<td>$2,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alpine</td>
<td>163</td>
<td>7</td>
<td>550</td>
<td>Alpine, Town of</td>
<td>WY5600156</td>
<td>Well and control building upgrades to increase production. Transmission and storage. New well. DWSRF loan has been made.</td>
<td>$400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crestview ISD Well</td>
<td>164</td>
<td>7</td>
<td>482</td>
<td>Crestview ISD</td>
<td>WY5600853</td>
<td>New well. Existing well has insufficient quantity.</td>
<td>$550</td>
<td></td>
<td></td>
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<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Bedford W&amp;S District</td>
<td>165</td>
<td>7</td>
<td>450</td>
<td>Bedford W&amp;S District</td>
<td>WY5600006</td>
<td>Booster pump, distribution extensions.</td>
<td>$400</td>
<td></td>
<td></td>
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<tr>
<td><strong>Baggs New Tank</strong></td>
<td>166</td>
<td>7</td>
<td>348</td>
<td>Baggs, Town of</td>
<td>WY5600058</td>
<td>Add second storage tank to increase available storage.</td>
<td>$350</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stone Gates I&amp;S District</td>
<td>167</td>
<td>7</td>
<td>170</td>
<td>Stone Gates I&amp;S District</td>
<td>WY5601329</td>
<td>Drill well and connect to system to replace failing well, or connect to Gillette system. Transmission, distribution, and storage upgrades.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain View Acres I&amp;S District</td>
<td>168</td>
<td>7</td>
<td>165</td>
<td>Mountain View Acres I&amp;S District</td>
<td>WY5600182</td>
<td>Upgrade distribution system and connect to Riverton.</td>
<td>$2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squaw Creek Wells</td>
<td>169</td>
<td>7</td>
<td>155</td>
<td>Squaw Creek Water District</td>
<td>WY5600737</td>
<td>Rehabilitate/redevelop existing wells/springs. New wells and transmission. Current wells inadequate.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fairway Estates Distribution and Storage</strong></td>
<td>170</td>
<td>7</td>
<td>100</td>
<td>Fairway Estates I&amp;S District</td>
<td>WY5600918</td>
<td>Replace undersized distribution mains. Repair or replace storage tank roof.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centennial W&amp;S District Distribution Improvements</td>
<td>171</td>
<td>7</td>
<td>100</td>
<td>Centennial W&amp;S District</td>
<td>WY5601232</td>
<td>Install bulk water station to sell potable water to people outside of district and to travelers. Replace meters.</td>
<td>$40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robertson Circle/Bacyrus Distribution System</td>
<td>172</td>
<td>7</td>
<td>25</td>
<td>Robertson Circle Water District</td>
<td>Unknown</td>
<td>Current system insufficient. Well failed. Construct new distribution system connected to Gillette system.</td>
<td>$1,700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan WTP Miscellaneous Upgrades</td>
<td>173</td>
<td>5</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Miscellaneous upgrades/replacements to improve system reliability: communications systems, soda ash feeders, granular activated carbon feeders, in-line chemical mixers, filter media, chlorine feeders, basin flow split, flocculation/sedimentation, building and roof over existing flocculator, backwash tank enlargement, water quality monitoring in finished water tanks throughout distribution system, upgrades to meet building and OSHA codes, reconnect recycle lagoon overflow, unit bypasses, taste and odor early warning system, electrical service.</td>
<td>$7,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan/SAWS Big Goose WTP Miscellaneous Upgrades</td>
<td>174</td>
<td>5</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Miscellaneous upgrades/replacements to improve system reliability: communications systems, influent pipeline, chemical feed equipment, flocculation/sedimentation equipment, valves, hydropneumatic tanks, scrubbers, air compressors, loading dock, chemical spill containment, recycle lagoons and decant pumps, unit bypasses, electrical service, taste and odor early warning system,</td>
<td>$4,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan/SAWS Intake Upgrades</td>
<td>175</td>
<td>5</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Miscellaneous upgrades to improve reliability: replace electrical service, replace valves, upgrade alarms.</td>
<td>$700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheridan/SAWS Hydropower Generation</td>
<td>176</td>
<td>5</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Implement hydropower generation within existing high pressure pipelines/vaults.</td>
<td>$1,000</td>
<td>EC</td>
<td>$1,000</td>
</tr>
<tr>
<td>Sheridan Extension and Looping</td>
<td>177</td>
<td>5</td>
<td>15840</td>
<td>Sheridan, City of</td>
<td>WY5600052</td>
<td>Extensions and looping of mains and an additional tank. Improve system redundancy and pressures and eliminate pump stations.</td>
<td>$17,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Sheridan Water &amp; Sewer Department Building</td>
<td>178</td>
<td>5</td>
<td>15840</td>
<td>Sheridan, City of WY</td>
<td>5600052</td>
<td>Construct building for water &amp; sewer operation and maintenance.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torrington Supply and Treatment Upgrades</td>
<td>179</td>
<td>5</td>
<td>5776</td>
<td>Torrington, City of WY</td>
<td>5600164</td>
<td>Supply, transmission, and treatment upgrades.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torrington Water Extensions</td>
<td>180</td>
<td>5</td>
<td>5776</td>
<td>Torrington, City of WY</td>
<td>5600164</td>
<td>Extend water main.</td>
<td>$55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mills WTP Upgrades</td>
<td>181</td>
<td>5</td>
<td>2591</td>
<td>Mills, Town of WY</td>
<td>5600036</td>
<td>Install UV disinfection unit and emergency generator.</td>
<td>$1,000</td>
<td></td>
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</tr>
<tr>
<td>Shoshoni Miscellaneous Water Improvements</td>
<td>182</td>
<td>5</td>
<td>635</td>
<td>Shoshoni, Town of WY</td>
<td>5600053</td>
<td>Extend and loop recently constructed 8&quot; waterline. Well pump modifications. SCADA system. Backup generator. Bulk water supply station.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cokeville Meters</td>
<td>183</td>
<td>5</td>
<td>506</td>
<td>Cokeville, Town of WY</td>
<td>5600015</td>
<td>New meters in unmetered areas.</td>
<td>$500</td>
<td>WC</td>
<td>$500</td>
</tr>
<tr>
<td>Central Wyo. Regional Water Emergency Generators</td>
<td>184</td>
<td>4</td>
<td>55000</td>
<td>Central Wyo Regional Water System WY</td>
<td>5600009</td>
<td>Emergency generator system to ensure reliability of treatment and supply.</td>
<td>$1,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Wyo. Regional Water Zone IIB Improvements</td>
<td>185</td>
<td>4</td>
<td>55000</td>
<td>Central Wyo Regional Water System WY</td>
<td>5600009</td>
<td>Additional booster station and transmission main to provide redundancy in Zone IIB.</td>
<td>$3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheyenne WTP Solids Handling</td>
<td>186</td>
<td>4</td>
<td>53011</td>
<td>Cheyenne, City of WY</td>
<td>5600011</td>
<td>New solids handling facilities for water treatment plant generated sludge.</td>
<td>$4,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheyenne Recycled Water</td>
<td>187</td>
<td>4</td>
<td>53011</td>
<td>Cheyenne, City of WY</td>
<td>5600011</td>
<td>Use recycled water from wastewater treatment plants for irrigation to reduce potable water use. Expand recycled water treatment system at Crow Creek plant. Construct pumping facility and pipeline to transfer effluent from Dry Creek plant to Crow Creek plant for recycle treatment. Expand recycle transmission and irrigation system. Total project cost approximately $11 million, anticipated to be funded partially from both Clean Water and Drinking Water SRFs.</td>
<td>$5,500</td>
<td>WC</td>
<td>$5,500</td>
</tr>
<tr>
<td>Cheyenne Sherard Hydropower Generator</td>
<td>188</td>
<td>4</td>
<td>53011</td>
<td>Cheyenne, City of WY</td>
<td>5600011</td>
<td>Install a hydropower generator unit at the Sherard Water Treatment Plant. This will generate power to operate the plant using the excess head available in the raw water pipeline.</td>
<td>$2,850</td>
<td>EC</td>
<td>$2,850</td>
</tr>
<tr>
<td>Cheyenne Belvoir Ranch Well Field</td>
<td>189</td>
<td>4</td>
<td>53011</td>
<td>Cheyenne, City of WY</td>
<td>5600011</td>
<td>Well field development at Belvoir Ranch. ($45 million total project; $20 million estimated max SRF could potentially fund.)</td>
<td>$20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheyenne Water &amp; Sewer Department Building</td>
<td>190</td>
<td>4</td>
<td>53011</td>
<td>Cheyenne, City of WY</td>
<td>5600011</td>
<td>Acquire an existing or construct a new building for the Water &amp; Sewer Department's administration, engineering &amp; water resource, and operation and maintenance divisions. DWSRF loan has been made.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cody Tank and Transmission</td>
<td>191</td>
<td>4</td>
<td>8835</td>
<td>Cody, City of WY</td>
<td>5600207</td>
<td>New tank and transmission main to provide redundancy in area of increasing demands.</td>
<td>$894</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
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<tr>
<td>Kemmerer- Diamondville Meter Replacement</td>
<td>192</td>
<td>4</td>
<td>3367</td>
<td>Kemmerer-</td>
<td>WY5600028</td>
<td>Replace existing water meters. Include automatic meter reading and leak detection capability.</td>
<td>$1,500</td>
<td>WC</td>
<td>$1,500</td>
</tr>
<tr>
<td>Hanna Master Planning</td>
<td>193</td>
<td>4</td>
<td>873</td>
<td>Hanna, Town of</td>
<td>WY5600025</td>
<td>Map all existing components and create master plan for future improvements.</td>
<td>$40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine Haven Meters</td>
<td>194</td>
<td>4</td>
<td>222</td>
<td>Pine Haven, Town of</td>
<td>WY5600191</td>
<td>Replace existing meters with new meters including automatic meters reading and leak detection system.</td>
<td>$280</td>
<td>WC</td>
<td>$280</td>
</tr>
<tr>
<td>Pine Haven Well and Tank</td>
<td>195</td>
<td>4</td>
<td>222</td>
<td>Pine Haven, Town of</td>
<td>WY5600191</td>
<td>New well and tank to provide redundancy to system and deal with increasing demands.</td>
<td>$1,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine Haven Effluent Reuse</td>
<td>196</td>
<td>4</td>
<td>222</td>
<td>Pine Haven, Town of</td>
<td>WY5600191</td>
<td>Reuse wastewater lagoon effluent for golf course and park irrigation to reduce potable water demand.</td>
<td>$1,000</td>
<td>WC</td>
<td>$1,000</td>
</tr>
<tr>
<td>Shoshone Municipal Pipeline</td>
<td>197</td>
<td>2</td>
<td>21200</td>
<td>Shoshone Municipal</td>
<td>WY5601198</td>
<td>Relocate pipeline due to highway project.</td>
<td>$1,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gillette Madison Pipeline Joint Bonding</td>
<td>198</td>
<td>2</td>
<td>19646</td>
<td>Gillette, City of</td>
<td>WY5600019</td>
<td>Joint bonding, internal mortar lining rehabilitation, cathodic protection of Madison Pipeline.</td>
<td>$1,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gillette Transmission Improvement</td>
<td>199</td>
<td>2</td>
<td>19646</td>
<td>Gillette, City of</td>
<td>WY5600019</td>
<td>Extend Zone 2 transmission along Lakeway Corridor. This will allow switchover of some current Zone 3 areas to be more appropriately served by Zone 2.</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evanston Meters</td>
<td>200</td>
<td>2</td>
<td>11507</td>
<td>Evanston, City of</td>
<td>WY5600150</td>
<td>Replace existing meters with new electronic meters, including automated meter reading system with leak detection capability.</td>
<td>$1,400</td>
<td>WC</td>
<td>$1,400</td>
</tr>
<tr>
<td>Rawlins Misc. Improvements</td>
<td>201</td>
<td>2</td>
<td>9006</td>
<td>Rawlins, City of</td>
<td>WY5600045</td>
<td>Extend water distribution system to outlying areas. Additional storage. Replace existing meters and/or meter reading system (including addition of leak detection capability) and add new meters in currently unmetered areas. Raw water system improvements.</td>
<td>$5,000</td>
<td>WC</td>
<td>$1,000</td>
</tr>
<tr>
<td>Rawlins Solar or Wind Energy</td>
<td>202</td>
<td>2</td>
<td>9006</td>
<td>Rawlins, City of</td>
<td>WY5600045</td>
<td>Solar or wind energy to power treatment and distribution systems.</td>
<td>$1,000</td>
<td>EC</td>
<td>$1,000</td>
</tr>
<tr>
<td>Bridger Valley Water Treatment Plant</td>
<td>203</td>
<td>2</td>
<td>5700</td>
<td>Bridger Valley</td>
<td>WY5600757</td>
<td>Treatment plant upgrades.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridger Valley Raw Water Intake</td>
<td>204</td>
<td>2</td>
<td>5700</td>
<td>Bridger Valley</td>
<td>WY5600757</td>
<td>Replace existing raw water intake with a new intake 14 miles upstream. New intake will be much closer to raw water storage reservoir. It will allow for less turbid raw water and better reliability in getting water from storage to intake.</td>
<td>$4,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridger Valley Distribution Looping</td>
<td>205</td>
<td>2</td>
<td>5700</td>
<td>Bridger Valley</td>
<td>WY5600757</td>
<td>Loop distribution mains to improve system reliability.</td>
<td>$1,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wright Meters</td>
<td>206</td>
<td>2</td>
<td>1562</td>
<td>Wright W&amp;S District</td>
<td>WY5600136</td>
<td>Replace existing meters with new meters including automated meters reading and leak detection system.</td>
<td>$800</td>
<td>WC</td>
<td>$800</td>
</tr>
<tr>
<td>Wright RJ-7 Well and Tank</td>
<td>207</td>
<td>2</td>
<td>1562</td>
<td>Wright W&amp;S District</td>
<td>WY5600136</td>
<td>Add RJ-7 well, tank, and transmission main to increase available supply and storage for rapidly growing area.</td>
<td>$3,250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Rank</td>
<td>Rank Points</td>
<td>Population</td>
<td>Owner</td>
<td>PWS No</td>
<td>Description</td>
<td>Amount ($1,000)</td>
<td>Green Type</td>
<td>Green Amount ($1,000)</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------</td>
<td>-------------</td>
<td>------------</td>
<td>----------------------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>------------</td>
<td>----------------------</td>
</tr>
<tr>
<td><strong>Pinedale Meters</strong></td>
<td>208</td>
<td>2</td>
<td>1412</td>
<td>Pinedale, Town of</td>
<td>WY5600041</td>
<td>New meters in unmetered areas. Replace existing old meters and/or retrofit wireless readers including leak detection capability.</td>
<td>$1,000</td>
<td>WC</td>
<td>$500</td>
</tr>
<tr>
<td><strong>Marbleton Meters</strong></td>
<td>209</td>
<td>2</td>
<td>720</td>
<td>Marbleton, Town of</td>
<td>WY5600223</td>
<td>New meters in unmetered areas.</td>
<td>$790</td>
<td>WC</td>
<td>$790</td>
</tr>
<tr>
<td>Dayton Raw Water</td>
<td>210</td>
<td>2</td>
<td>689</td>
<td>Dayton, Town of</td>
<td>WY5600202</td>
<td>Raw water supply to alleviate surface water treatment costs, to eliminate potable water irrigation, and to enable regionalization with Town of Ranchester.</td>
<td>$500</td>
<td>WC</td>
<td>$500</td>
</tr>
<tr>
<td>Rolling Hills</td>
<td>211</td>
<td>2</td>
<td>449</td>
<td>Rolling Hills, Town of</td>
<td>WY5600782</td>
<td>Add well. Distribution extensions.</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LaBarge Meters</strong></td>
<td>212</td>
<td>2</td>
<td>431</td>
<td>LaBarge, Town of</td>
<td>WY5600222</td>
<td>New meters in unmetered areas.</td>
<td>$135</td>
<td>WC</td>
<td>$135</td>
</tr>
<tr>
<td>Sierra Madre</td>
<td>213</td>
<td>2</td>
<td>195</td>
<td>Sierra Madre W&amp;S JPB</td>
<td>WY5601332</td>
<td>Construct new storage tank, drill new well, extend distribution system and loop water lines, upgrade existing wellfield controls.</td>
<td>$2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rivermeadows Water</td>
<td>214</td>
<td>2</td>
<td>90</td>
<td>Rivermeadow s Water District</td>
<td>WY5600786</td>
<td>Replace three old pumps.</td>
<td>$40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meadow Springs ISD</td>
<td>215</td>
<td>2</td>
<td>37</td>
<td>Meadow Springs I&amp;S District</td>
<td>WY5601507</td>
<td>Meter pits and curb stops; currently unmetered.</td>
<td>$30</td>
<td>WC</td>
<td>$30</td>
</tr>
</tbody>
</table>

**Total of projects expected to submit applications in FY2011** (project names in **bold italics**) | $69,054 | $11,015 |

**Total of all listed projects** | $385,472 | $24,095 |

**Green Project Types**

G = Green Infrastructure
E = Energy Efficiency
W = Water Efficiency
I = Environmentally Innovative
C = Categorically Green Eligible
B = Business Case Required
Appendix 2: Ranking Criteria for DWSRF Priority List

SYSTEM/PROJECT NAME _________________________________________________________
PWS No. __________________________

Wyoming Drinking Water State Revolving Fund Ranking System

<table>
<thead>
<tr>
<th>I.</th>
<th>PUBLIC HEALTH ISSUES</th>
<th>Available Points</th>
<th>Points Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Outbreak of waterborne disease</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td>Fecal or other pathogen detection which results in a boil order</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td>Positive Coliform results which do not result in a violation</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Public Health Issues Points

<table>
<thead>
<tr>
<th>II.</th>
<th>COMPLIANCE ISSUES</th>
<th>Available Points</th>
<th>Points Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Microbiological violation</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td>Nitrate or nitrite MCL exceedance</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td>Lead and Copper Rule action level exceedance</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td>Turbidity exceedance</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>E.</td>
<td>Non-compliance with SWTR, ISWTR, ESWTR, GWDR, GWUDI or currently applicable regulation</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>F.</td>
<td>MCL exceedances of regulated contaminants (not mentioned above)</td>
<td>10 to 40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. 1 contaminant</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. 2 to 4 contaminants</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. &gt;4 contaminants</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>G.</td>
<td>Facility is subject to a compliance issue, enforcement action and/or enforcement referral.</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Compliance Issues Points
### III. SYSTEM DEFICIENCIES

Points will be awarded for system deficiencies that may affect public health or the ability to comply with SDWA. Points will be awarded to a project from only one of the three categories below.

<table>
<thead>
<tr>
<th>A. Distribution system</th>
<th>Available Points</th>
<th>Points Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distribution system equipment is deteriorated and results in numerous or serious leaks, and/or creates a cross-contamination potential.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2. Applicable disinfectant residual maintenance requirements are not met.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>3. Project will replace unsafe materials.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>4. Minimum normal operating pressure is not met (35 psi).</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5. Distribution system is inadequate to meet existing demands.</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Treatment System</th>
<th>Available Points</th>
<th>Points Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Treatment system cannot consistently meet log removal requirements and/or turbidity standards.</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>2. Treatment system is subject to impending failure or has failed.</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>3. The required disinfection systems are not installed or are inadequate.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>4. Treatment system equipment does not meet the requirements of Wyoming Water Quality Rules and Regulations Chapter 12.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>5. System equipment is projected to become inadequate without upgrades within 5 years.</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Storage System</th>
<th>Available Points</th>
<th>Points Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Storage system is subject to impending failure, has failed, cannot be easily cleaned, or subject to contamination.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>2. Applicable contact time requirements cannot be met without an upgrade.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>3. System suffers from low static pressures.</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>4. Storage system demand exceeds 90% of storage capacity.</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

![System Deficiencies Points](image-url)
IV. AFFORDABILITY

Points will be awarded based on a project’s affordability.

A. Relative income index: ratio of local annual median household income (AMHI) to the state AMHI.

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Available Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 50%</td>
<td>15</td>
</tr>
<tr>
<td>50%-70%</td>
<td>10</td>
</tr>
<tr>
<td>70%-90%</td>
<td>4</td>
</tr>
<tr>
<td>&gt; 90%</td>
<td>1</td>
</tr>
</tbody>
</table>

B. Relative water rate index: ratio of expected average annual residential user charge for water services resulting from the project, including costs recovered through special assessments, to the local AMHI.

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Available Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 2.5%</td>
<td>15</td>
</tr>
<tr>
<td>2.0% to 2.5%</td>
<td>10</td>
</tr>
<tr>
<td>1.5% to 2.0%</td>
<td>6</td>
</tr>
<tr>
<td>1.0% to 1.5%</td>
<td>3</td>
</tr>
<tr>
<td>&lt; 1.0%</td>
<td>1</td>
</tr>
</tbody>
</table>

**Affordability Points**

**POINTS AWARDED**

Public Health Issues Points
Compliance Issues Points
System Deficiencies Points
Affordability Points

Total Points

Population =

Note: Population will be used in cases of ties. Larger systems will be given priority.
Appendix 3: Summary of Comments and Responses from Public Meeting

Written comments received prior to meeting:

Comment: With so much money being allocated to green projects, it would make more sense to differentiate them from the remaining projects. As such, the green projects would have their own separate priority listing.

Response: We have identified all green projects in the ranking systems. Although they are not ranked as the number one, two, three, etc ranked green projects, they appear as such by the order in which they are listed. We believe it is important for the Board and everyone else to view these projects in the greater overall funding needs of water systems. The United States Environmental Protection Agency (USEPA) has provided us guidance to rank green projects per the April 21, 2010 memo from James Hanlon USEPA Washington DC, “DWSRF projects that are qualified (in whole or in part) for GPR should be ranked on the same State priority list with non-GPR projects, but must be identified as GPR projects on those lists.”

Comment: Along this same note, use of green monies for projects such as hydroturbine facilities should be a higher priority than installation of water meters. Most public water systems now have water meters installed, which have been installed by the water utility. To provide green monies to those relatively few water systems that have not kept with the others should not be of the same priority as a hydroturbine projects which can provide some true value towards energy efficiency and fewer carbon emissions.

Response: The prioritization of green projects is a new task. The 1996 SDWA amendments required states to create ranking systems that evaluated public health, SDWA compliance, and affordability criteria. Pure and/or sole meter installation projects rank very low (see Cokeville Meters ranked 179 on 2011 draft IUP). Projects may include a meter portion as part of a larger project and have an overall higher ranking. Hydroturbine projects may rank higher than pure meter replacement projects (see Sheridan/SAWS Hydropower Generation project ranked 172 on draft 2011 IUP). USEPA has provided no clear direction regarding water meters and/or hydroturbines as they affect SDWA compliance or public health. As such these projects rank at the low end on the list of projects.

Verbal comments received during May 5th, 2010 meeting:

Comment: Are tribes eligible for Wyoming State Revolving Funds?

Response: No, there is a federal set-aside administered by USEPA specifically for tribes.
Comment: Are there sustainability requirements included in the FFY 2010 SRF grants, and if yes how will these be implanted in SRF?

Response: USEPA has not provided any guidance or definitive directions for sustainability. If and when they do, these will be included either in rule or policy.

Comment: How will USDA Rural Development obtain Annual Median Household Income data?

Response: (from Alana Cannon, USDA RD Community Programs Director) There will be an AMHI survey done every five years, separate from US census.

Comment: Pine Haven does not have its own zip code, they use Moorcroft zip code.

Response: If interested in funding, Pine Haven should start early. If desired town may conduct its own AMHI survey.

Comment: What is the combined list of Clean Water and Drinking Water project costs’ total?

Response: Approximately $800M.

Comment: Do not underestimate sustainability requirements.

Response: Wyoming SRF will implement requirements when they are promulgated.
Appendix K

Federal Mineral Royalty

Capital Construction Account Grants

SLIB Rules and Regulations
RULES AND REGULATIONS
STATE LOAN AND INVESTMENT BOARD

Chapter 3

Federal Mineral Royalty Capital Construction Account Grants

Section 1. Authority.

This chapter is adopted pursuant to W.S. 9-4-604 and Laws 1979, Chapter 160, Section 6.

Section 2. Definitions.

As used in this chapter:

(a) "Board" means the State Loan and Investment Board.

(b) "Director" means the Director of the Office of State Lands and Investments.

(c) "Office" means the Office of State Lands and Investments.

(d) "Special district" means hospital, fire protection, sanitary and improvement, solid waste disposal, improvement and service, and water and sewer districts.

(e) "Emergency vehicles" means new and complete fire trucks and ambulances owned by the applicant, and under original manufacturer's warranty. Fire trucks must also meet current National Fire Protection Association (NFPA) standards, except for wildland firetrucks. The Board may authorize grants for used fire vehicles.

(f) "Eligible project costs" means total project cost, less ineligible project costs.

Section 3. General Policy.

The Board shall award grants under the provisions of this chapter in such a manner and to such applicants as shall, in the judgment of the Board, inure to the greatest benefit of the citizens of the state and represent a prudent use of grant funds.

Section 4. Distribution of Funds.

The Board shall award funding in the following manner:

(a) The Board shall award approximately eighty-seven and one half percent (87.5%) of the available funds for grants that do not exceed fifty percent (50%) of eligible project costs.

(b) The Board shall award approximately twelve and one half percent (12.5%) of the available funds for grants that are over fifty percent (50%) but do not exceed seventy-five percent (75%) of eligible project costs. In the event the Board does not award all of the designated 75% grant funds available at any grant meeting, those funds will be carried forward to the next grant meeting. In the event that the Board has not awarded all of the 75% grant funds by the end of the biennial appropriation period, the remaining funds will revert to the 50% grant fund.

3-1
(c) The Board retains the authority to adjust the above award percentages as necessary to complete project funding.

Section 5. Grant Eligibility.

(a) Applicants. Incorporated cities and towns, counties, special districts and joint powers boards shall be eligible to apply for grants under this chapter. If the applicant is a special district or joint powers board, it must be legally formed and approved prior to submitting an application. An applicant must be in compliance with all applicable reporting requirements with the Wyoming Department of Audit prior to its application being considered by the Board. Applicants shall be allowed to submit multiple applications for fifty percent (50%) grants and up to two seventy-five percent (75%) grants for different projects at one grant meeting.

(b) Purposes. Pursuant to W.S. 9-4-604(a), the Board may award grants necessary to alleviate an emergency situation which poses a direct and immediate threat to health, safety or welfare, to comply with a federal or state mandate, or to provide an essential public service.

(i) The Board interprets the term, “federal or state mandate” as used in W.S. 9-4-604(a) to mean those federal or state mandates that specifically concern public health and safety.

(ii) The Board interprets the term, “essential public service” as used in W.S. 9-4-604(a) to mean a public service facility owned by the applicant and available for use by the general public including: water and sewer projects, storm drainage projects, street and road projects, solid waste disposal projects, acquisition of emergency vehicles, public administration buildings, health care facilities, senior citizens centers, jail and detention facilities, facilities needed to provide services to the disabled, costs to purchase medical equipment that generates revenue sufficient to service a Joint Powers Act Loan, as determined by the Board, and similar facilities as authorized by the Board. The term also means refinancing outstanding loans extended to the applicant.

(c) Maximum Grant Percentage. Pursuant to W.S. 9-4-604(g)(ii) and W.S. 9-4-604(h)(ii) the Board may award grants for over 50% to municipalities if the Board determines that the municipality “...either levied at least seven (7) mills for operating expenses including special district levies chargeable against the general city or town levy during the current fiscal year or is imposing the optional tax permitted by W.S. 39-15-204(a)(i) or (iii) at the time of the application and is utilizing all other local revenue sources reasonably and legally available to finance the project...” The Board may make grants in excess of thirty percent (30%) to counties and special districts “...if the board determines that the applicant either levied at least eleven (11) mills for operating expenses during the current fiscal year or is imposing the optional tax permitted by W.S. 39-15-204(a)(i) or (iii) at the time of the application and is utilizing all other local revenue sources reasonably and legally available to finance the project...” The Board shall use the following criteria to determine if applicants are utilizing all other local revenue sources reasonably and legally available to finance the project:

(i) Municipalities that meet one or both of the following criteria are eligible to receive grant assistance up to seventy-five percent (75%) of the eligible project costs: (1) Have a population of less than 1,300 according to the latest federal census. (2) Located within a county where the three-year average of the local government share of state sales and use tax per capita is less than seventy percent (70%) of the statewide average. The Office will use the three most current annual reports from the Wyoming Department of Revenue to determine the three-year average of the local government share of sales and use tax. The Office will use the current federal census to determine the per capita percentage.
(ii) Counties and hospital and fire protection districts located within a county, whose assessed valuation is less than two and one-half percent (2.5%) of the State’s total assessed valuation are eligible to receive grant assistance up to seventy-five percent (75%) of the eligible project costs. The Office will use the current annual report from the Wyoming Department of Revenue to determine assessed valuation. The Office will use the current federal census to determine population.

(iii) Application for a seventy-five percent (75%) grant precludes a simultaneous application for a fifty percent (50%) grant for the same project. However, applicants may apply for separate projects from both grant pools.

(d) Ineligible Project Costs. The following project costs shall be ineligible for reimbursement from grant funds and shall be ineligible to be counted toward the applicant’s match:

(i) Costs for sidewalks that are owned or maintained by a private property owner;

(ii) Costs for tap fees, sewer and water fees, and plant investment fees;

(iii) Engineering fees, including design, inspection and contract administration costs, over twenty percent (20%) of project cost;

(iv) All non-cash costs except:

(A) Land, labor, materials, equipment, and services provided by the applicant, and used for project purposes, valued at reasonable, actual cost; and

(B) Land, labor, materials, equipment, and services provided to the applicant by others, at no cost to the applicant, used for project purposes and valued at reasonable, actual cost.

(v) Costs for preparation or presentation of grant or loan applications for any source of funding;

(vi) Costs for transportation, meals and lodging incurred anywhere way from the site of the project;

(vii) Costs for furnishings;

(viii) Legal fees;

(ix) Costs related to issuance of bonds;

(x) Costs for real property in excess of current fair market value and/or costs for an amount of real property in excess of that needed for project purposes;

(xi) Costs to establish and form special districts or joint powers boards;

(xii) Costs incurred prior to grant award, except costs for architectural and engineering design or in emergency situations;

(xiii) Costs for a contingency or extra work allowance in excess of 10% of estimated construction costs.

3-3
Section 6. Application Procedure

(a) Applications. Separate applications shall be prepared for each project. Applicants shall submit three (3) copies of their completed application to the Office. Applications shall be properly executed by the officers of the applicant.

(b) Timing. The Board shall meet regularly on the third Thursday of each January and June to consider applications for grants under this chapter. Applications for the January Mineral Royalty Grant meeting must be received by the third Thursday of the preceding September. Applications for the June Mineral Royalty Grant meeting must be received by the third Thursday of the preceding February. Applications for emergency consideration must be received at least ten (10) working days prior to any regular meeting of the Board.

(c) Renewal of Applications. Applications shall be retained by the Office and may be renewed only by a written request from the applicant received within the time period established in subsection (b) of this section. If applications are not renewed, they shall be destroyed by the Office.

(d) Information Required for All Applications. The following information shall be provided in all applications:

(i) An application cover page on a form provided by the Office;

(ii) A project summary on a form provided by the Office;

(iii) The grant amount requested and percentage of total project costs that the grant would pay;

(iv) A full description of the proposed project, specifically including, but not limited to, a phase construction schedule, if applicable;

(v) A detailed project budget broken into at least six (6) month intervals delineating all costs of the proposed project and the method by which the project costs were estimated;

(vi) A licensed engineer's statement of the feasibility of the project, except for the purchase of emergency vehicles;

(vii) The geographic area and population served directly and indirectly by the project and the percentage of the applicant's population directly served by the project;

(viii) A description of other project funding sources, committed or pending, the portion of the project cost expected to be funded from each source, including any future grant applications under this chapter, and copies of funding commitments from all project funding sources, including the applicant, to demonstrate commitment to the project;

(ix) If the applicant is a special district, a copy of the resolution that shows formation of the special district and certification from the Board of County Commissioners that the special district currently exists;

(x) If the applicant is a joint powers board, a copy of the certificate of organization filed with the Secretary of State, and a copy of an executed joint powers agreement approved by the Attorney General;
(xi) A standard resolution authorizing the filing of the application on a form provided by the Office;

(xii) A financial statement of the applicant, on a uniform "General Financial Information" form provided by the Office;

(xiii) If an applicant submits multiple applications under this chapter for consideration at one meeting, a priority ranking of the multiple applications as established by the applicant;

(xiv) If the project is needed to meet federal or state health and safety requirements, documentation of the specific requirements and an explanation of how the project addresses the requirements;

(xv) For applications submitted by a special district, either standing alone or as a member of a joint powers board, the written review as required by W.S. 9-4-604(h); and

(xvi) Other applicable information as requested by the Office.

(e) Additional Information Required. If the grant funds requested by the applicant exceed fifty percent (50%) of estimated project costs, the following information shall also be provided in the application:

(i) If the grant request is for water facilities,

(A) Whether water meters have been installed or will be installed;

(B) Whether the applicant will require the owners of all new additions of land to the city or town to pay all costs of expanding the water system within and to the boundaries of the addition; and

(C) Whether water rates, tap fees, and plant investment fees are in effect or are to be adopted, and an analysis of whether the water rates will be adequate to finance the operation and maintenance of the system;

(ii) If the grant request is for sewer facilities,

(A) Whether the applicant will require the owners of all new additions of land to the city or town to pay all costs of expanding the sewer system within and to the boundaries of the addition; and

(B) Whether sewer rates, tap fees, and plant investment fees are in effect or are to be adopted, and an analysis of whether the sewer rates will be adequate to finance the operation and maintenance of the system.

(f) Preliminary Review. Within forty-five (45) working days of receipt of an application, the Office shall notify the applicant, in writing, if the application lacks any of the items required in subsections (d) and (e) of this section. The applicant shall have ten (10) working days to submit the required information.

(g) Incomplete Applications. Incomplete applications shall not be presented to the Board for consideration.
Section 7. Evaluation Criteria.

(a) Criteria. The Board shall evaluate applications utilizing the following criteria:

(i) The extent of match committed to the project from all sources;

(ii) Whether the applicant has made a significant commitment of local resources;

(iii) Whether the applicant has matching funds for the project from other than state grants;

(iv) Whether the project is appropriately sized in relation to the population to be served by the project;

(v) The relative urgency of the project;

(vi) Whether the applicant is current on all its repayment obligations to the Board;

(vii) The extent to which the applicant is utilizing, or plans to utilize, available and qualified Wyoming based professional firms and contractors on the project;

(viii) The financial need of the applicant, as determined by the Board;

(ix) The percentage of the applicant's population directly served by the project;

Section 8. Board Consideration.

The Board shall consider each application, allow for comments from the applicant and from the Director, and establish the maximum amount of the grant and the percent of eligible project costs that will be paid by the grant.

Section 9. Grant Disbursement and Administration.

(a) Grant Disbursement. Grant funds shall be disbursed to the applicant only as needed to discharge obligations incurred in accordance with the Board approved percentage split of eligible project costs. Requests for disbursements shall be made on a form supplied by the Office and supported by adequate proof that such obligations have been incurred for project purposes and are due and owing.

(b) The minimum grant disbursement shall be Five Hundred dollars ($500.00) unless it is the final disbursement of grant funds for the project.

(c) Fund Reversion.

(i) If the Director determines that the project has not been commenced within one (1) year from the date the grant is approved, the grant will automatically expire. Based upon information supplied by the grantee, the Director may grant an extension of time in which to commence the project.

(ii) If the Director determines that the project has not been completed within a reasonable time, he shall notify the grantee in writing at least thirty (30) days prior to presenting the matter for Board review. The Board, upon review of the project circumstances, may terminate or modify the grant award.
(iii) If the Director determines that the project is complete, but the full amount of the grant has not been expended, the Office shall notify the grantee of this determination. Thirty (30) days following the notification, the unused portion of the grant or loan shall revert to uncommitted status.

Section 10. Audits and Inspections.

The Board may, at its expense, conduct an audit of the records of the applicant and inspect the construction and operation of the project.

Section 11. Rule Amendments.

Amendments to these rules do not apply to applications filed after the effective date for phased construction projects which have already received partial funding under this chapter.
Appendix L

Wyoming Joint Powers Act Loans

SLIB Rules and Regulations
Section 1. Authority.

This Chapter is adopted pursuant to W.S. 16-1-109.

Section 2. Definitions.

(a) "Agencies" means Wyoming counties, municipal corporations, school districts, community college districts, special districts and Joint Powers Boards created under this act specifically involved in providing facilities or functions enumerated in W.S. 16-1-104(c).

(b) "Board" means the State Loan and Investment Board.

(c) "Director" means the Director of the Office of State Lands and Investments.

(d) "Office" means the Office of State Lands and Investments.

(e) "Revenue-generating public facilities" means facilities owned by the applicant that generate revenue under this chapter from user fees or assessments paid by the beneficiaries of the facilities.

Section 3. General Policy.

(a) The Board shall extend loans under the provisions of this chapter in such a manner and to such applicants as shall, in the judgment of the Board, inure to the greatest benefit of the citizens of the state and represent a prudent use of loan funds.

Section 4. Loan Eligibility.

(a) Applicants. Agencies shall be eligible to apply for loans under this chapter. If the applicant is a special district or joint powers board, it must be legally formed and approved prior to loan application. Applicants must be in compliance with all applicable reporting requirements with the Wyoming Department of Audit prior to its application being considered by the Board.

(b) Purposes. Loans may be extended for agency purposes involving the planning, construction, acquisition, improvement, emergency repair, acquisition of land for, refinancing of existing debt for, and operation of revenue-generating public facilities. However, in no event shall a loan be extended to pay off or refinance a loan that was previously approved under this
Section 5. Application Procedure.

(a) Applications. Separate applications shall be prepared for each project. Applicants shall submit three (3) copies of their completed application to the Office.

(b) Timing. Applications for loans under this chapter, and for emergency loan/grant combinations, must be received at least 10 working days prior to any regular monthly meeting of the Board. The Board shall meet regularly on the third Thursday of each January and July to consider applications for non-emergency loan/grant combinations. Applications for the January Mineral Royalty Grant meeting must be received by the third Thursday of the preceding October. Applications for the July Mineral Royalty Grant meeting must be received by the third Thursday of the preceding April.

(c) Information Required. The following information shall be provided in the application:

(i) A full description of the proposed project, including a licensed engineer's statement of feasibility of the project, if applicable.

(ii) The loan amount requested and source of repayment.

(iii) A copy of the applicant's annual budget for the preceding and current fiscal years and a completed financial statement provided on a "General Financial Information" form provided by the Office, that includes, but is not limited to the following information:

(A) Assessed valuation for the current and two preceding fiscal years;

(B) Total bonded and non-bonded indebtedness, including outstanding principal balance, interest rate, and remaining term;

(C) Total mills levied within the jurisdiction of the applicant for the current and two preceding years; and, a breakdown of the mill levy for the current fiscal year;

(D) Sales and use tax imposed within the jurisdiction of the applicant;

(E) A summary of the applicant's total investments and cash balances for the two preceding fiscal years;

(F) If the application is for a water or sewer project the applicant's current water and sewer rates, tap fees and an indication if water meters have been installed.

(iv) A description of other project funding sources, committed or pending, and the portion of the project cost expected to be funded from each source, including any future loan applications under this chapter. A copy of the funding commitment from other participants must be provided.
(v) If applicable, a copy of the joint powers agreement approved by the Attorney General and a copy of the certificate of organization filed with the Secretary of State.

(vi) If the applicant is a special district, the application shall also include documentation of the formation of the special district and certification by the Board of County Commissioners that the special district currently exists.

(vii) Applications shall be properly executed by the officers of the applicant. A copy of the "Standard Resolution" form provided by the Office authorizing the filing of the application shall be attached.

(d) Preliminary Review. Within 45 working days of receipt of an application for a non emergency grant/loan, the Office shall notify the applicant, in writing, if the application lacks any of the items required in subsection (c) of this section. The applicant shall have 10 working days to submit the required information.

(e) Incomplete Applications. Incomplete applications shall not be presented to the Board for consideration.

Section 6. Evaluation.

(a) Criteria. The Office shall evaluate applications and the Director will formulate a recommendation to the Board utilizing the following criteria:

(i) Whether the user fees or assessments generated by the project will be sufficient so that the loan may be considered a reasonable and prudent investment of state permanent funds.

(ii) Whether the applicant is current on all its repayment obligations to the Board.

(iii) The extent to which the applicant is utilizing, or plans to utilize, available and qualified Wyoming based professional firms and contractors on the project.

(b) Interagency Consultation. The Director shall request that pertinent state agencies assist in the review of the applications and provide comments to the Office for Board consideration.

Section 7. Board Consideration.

(a) The Board shall consider each application, allow for comments from the applicant and from the Director, and establish the amount of the loan, the term of the loan, and the type of security required to secure the loan pursuant to W.S. 16-1-109(d)(ii).

Section 8. Loan Interest.

(a) The interest rate for loans under this chapter shall be pursuant to Chapter 14 of the rules as established by the Board and a 1% origination fee shall be collected on the amount borrowed.

(a) The Board may require a first position security interest in the revenue generating facility and the related user fees or assessments.

(b) If the Board has required a lien on the facilities, the applicant shall:

   (i) Maintain adequate insurance on the facility;

   (ii) Pay all applicable taxes and assessments when due;

   (iii) Maintain the facility in good condition.

Section 10.  Disbursement of Loan Proceeds.

(a) At closing, the loan proceeds shall be deposited in an interest-bearing escrow account to be disbursed solely for the approved loan purposes. The borrower shall pay the costs of the escrow account. Interest earned shall be credited to the borrower. Borrower shall submit all requests for payment on a form provided by the Office, with supporting documentation, as required by the Director. The Office shall approve or disapprove pay requests in whole or in part within 5 working days and notify escrow bank of the amount to be disbursed to the borrower.

Section 11.  Audits and Inspections.

(a) The Board may, at its expense, conduct an audit of the records of the applicant and inspect the construction and operation of the project.
Appendix M

Fees for Administrative Services

and Interest Rates

SLIB Rules and Regulations
RULES AND REGULATIONS
STATE LOAN AND INVESTMENT BOARD

Chapter 14

Fees For Administrative Services and Interest Rates

Section 1. Authority.

(a) This Chapter is promulgated under the authority of W.S. 11-34-103(a).

Section 2. Definitions.

As used in this chapter:

(a) "Board" means the State Loan and Investment Board.

(b) "Director" means the Director of the Office of State Lands and Investments.

(c) "Office" means the Office of State Lands and Investments.

Section 3. Fees.

(a) The Board will collect fees for administrative services occurring from activities associated with its programs conducted in accordance with the following Board rules:

(i) Farm Loans:

(A) Application Fee - $100.00

(B) A fee of 1% of the amount of the loan shall be paid by the borrower at closing.

(ii) Small Water Development Project Loans:

(A) Application Fee - $100.00

(B) A fee of 1% of the amount of the loan shall be paid by the borrower at closing.

(iii) Beginning Agricultural Producer Loans

(A) Application Fee - $100.00

(B) A fee of 1% of the amount of the loan shall be paid by the borrower at closing.

(iv) Loans for the purpose of restoring or enhancing livestock numbers in the state
(A) Application Fee - $100.00

(B) A fee of 1% of the amount of the loan shall be paid by the borrower at closing.

(b) The fee for reamortization of any loan will be 1% of the reamortized amount.

Section 4. Interest Rates.

(a) The Board will charge interest rates on all loans and amortized sales contracts associated with its programs conducted in accordance with the following Board rules:

(i) Chapter 2 - Joint Powers Act Loans:

An interest rate not less than the average rate of return realized on all Permanent Mineral Trust Fund investments as determined by the State Treasurer for the five (5) calendar years immediately preceding the year in which the loan is made, no equity requirement.

(ii) Chapter 5 - Small Water Development Project Loans:

(A) 6% per annum.

(B) Sales Contracts - Sale of lands acquired through small water development project loan foreclosure:

(I) 8% per annum for contracts up to 50% of sale price;

(II) 9% per annum for contracts up to 60% of sale price;

(III) 10% per annum for contracts up to 70% of sale price.

(iii) Chapter 7 - Farm Loans:

(A) 8% per annum for loans up to 50% of appraised value;

(B) 9% per annum for loans up to 60% of appraised value.

(C) For “Beginning Agricultural Producer” loans, as defined in Chapter 7, Section 2(c), for the first ten (10) years of the loan the rate shall be the lower of 8% or the average yield on a ten (10) year U.S. Treasury Bond for the previous year, rounded to two (2) decimals, as of the date of loan closing. At the end of ten (10) years the interest rate shall be 8%. Loans to beginning agricultural producers shall not exceed 70% of value.
(D) For loans for the purpose of enhancing or restoring livestock numbers in the state pursuant to W. S. 11 – 34 – 113(j), the interest rate shall be equal to seventy-five percent (75%) of the lowest current rate set by the Board for farm loans.

(E) Sales Contracts - Sale of lands acquired through farm loan foreclosure:

(I) 8% per annum for contracts up to 50% of sale price;

(II) 9% per annum for contracts up to 60% of sale price;

(III) 10% per annum for contracts up to 70% of sale price.

(iv) Chapter 11 - Clean Water State Revolving Fund Loans:

(A) 0% per annum on Department of Environmental Quality Loans for corrective actions at leaking underground storage tank sites, pursuant to W.S. 16-2-106(b), no equity requirement;

(B) 2.5% per annum on all other loans, no equity requirement.

(v) Chapter 16 - State Drinking Water Revolving Account:

(A) 2.5% per annum on all loans, no equity requirements.
Appendix N

Wyoming State Community Development Block Grant Program and

Business Ready Community Grant and Loan Program
CDBG Rules, As Amended,
Adopted Date: June 3, 2010.

Wyoming State Community Development Block Grant Program
Final Rules

Prepared by:

Wyoming Business Council
214 West 15th Street
Cheyenne, Wyoming 82002
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Section 1. Authority.

(a) These rules and regulations describe policies for the Wyoming Community Development Block Grant Program (CDBG) that was assumed by the state of Wyoming from the Department of Housing and Urban Development beginning with the Fiscal 1982 program. Rule-making for this program is the responsibility of the Wyoming Business Council as authorized by W.S. 9-12-104(a)(iv) and W.S. 9-1-216. The Wyoming Business Council will utilize these regulations to select and approve qualified community development grants, planning only grants, technical assistance, job training, downtown development, infrastructure applicants, convertible loans, section 108 loans, and float loans. The staff and Board of the Wyoming Community Development Authority (WCDA) will select recipients of housing grants.

Section 2. Eligible Applicants.

(a) Only counties and incorporated cities and towns may apply. However, local governments may apply on behalf of other units of governments or special interest groups. The cities of Cheyenne and Casper are not eligible to apply, since funds are available to them under the HUD Entitlement Program. However, Laramie and Natrona counties may apply on behalf of a project located within the municipal boundaries of Cheyenne and Casper respectively, if it can be demonstrated the benefits of the project are available on a countywide basis.

(b) All applicants must certify that each project has allowed citizen comment through the public hearing process before submission to the Wyoming Business Council. (Refer to Section 8, Citizen Participation, for further information).

(c) All applications must be accompanied by a resolution passed by the city or town council or the county commissioners and signed by the chief elected official.
(d) Only one application from each local government will be accepted for the Community Development Program described in Chapter 4. More than one application from each local government will be accepted for the Economic Development Program described in Chapter 2.

(e) Joint applications from two or more eligible applicants are permissible. Applicants as part of a joint project cannot also apply as individual applicants for the Community Development Program described in Chapter 5.

(f) Economic development applications will be considered from counties and incorporated cities and towns on behalf of specific businesses. The sponsoring entity must demonstrate particular benefit accruing to that entity as a result of the grant. This benefit must pertain to one of the three national objectives listed below.

Section 3. National Objectives.

(a) No application will be considered unless it supports at least one of three National Objectives. The application must identify which of the three needs it meets. Not all National Objectives can be applied to all project types. The Division of Investment Ready Communities should be contacted to determine how a particular project might meet a National Objective. The three National Objectives are:

(i) Benefit to low and moderate income families.

(ii) Aid in the prevention or elimination of slums or blight.

(iii) Activities designed to meet community development needs having a particular urgency.

(b) Activities considered to benefit low to moderate income families are divided into four categories.

(i) Area benefit activities
(ii) Limited clientele activities
(iii) Housing activity and
(iv) Job creation or retention activity.
(A) Area Benefit Activity.

(I) An area benefit activity is an activity that meets the identified needs of low to moderate income families residing in an area where at least fifty-one percent (51%) of the residents are low to moderate income persons. The benefits of this type of activity are available to all persons in the area regardless of income. Such an area must be the entire area served by the activity. An activity that serves an area that is not primarily residential in character shall not qualify under this criterion.

(II) To document area benefit the applicant must: (1) define the service area, and (2) collect income characteristics of families and unrelated individuals in the service area. The applicant may use either HUD provided data comparing census data with low and moderate-income levels or locally provided survey data that is methodologically sound.

(B) Limited Clientele Activities.

(I) Limited clientele activity is an activity that benefits a specific group of people rather than all the residents in a particular area, of which at least fifty-one percent (51%) are low to moderate income persons. To qualify under this category, the activity must meet one of the following tests:

(1.) The project must exclusively benefit a clientele who are generally presumed to be principally low and moderate income persons. The following groups are presumed to meet this criterion unless there is evidence to the contrary:

   a. Abused children
   b. Elderly persons
   c. Battered spouses
   d. Homeless persons
   e. Handicapped adults meeting the Bureau of Census’ definition of severely disabled adults
      (See 24 CFR 570.483(b)(2)(ii)(A))
   f. Illiterate adults
   g. Persons living with AIDS, and
   h. Migrant farm workers.
(2.) Require information on family size and income so that it is evident that at least fifty-one percent (51%) of the clientele are persons whose family incomes does not exceed the low and moderate income limits.

(3.) Have income eligibility requirements limit the activity exclusively to low and moderate income persons.

(4.) Be of such a nature and location that it may be concluded that the activity's clientele will primarily be low and moderate income persons.

(II) Limited clientele projects also include special projects directed to the removal of material and architectural barriers in existing buildings restrict the mobility and accessibility of elderly or handicapped persons to publicly-owned and privately-owned non-residential buildings, facilities and improvements, and the common areas of residential structures containing more than one dwelling unit.

(C) Housing Activities.

(I) A low and moderate housing activity is an activity adds or improves permanent residential structures will be occupied by low to moderate income households upon completion. The housing can be either owner or renter occupied units in either one family or multi-family structures. Rental units occupied by low to moderate income households must be occupied at affordable rents and the applicant must have criteria for determining affordable rents for this purpose.

(D) Job Creation and Retention Activity.

(I) A low to moderate jobs activity is one creates or retains permanent jobs, at least fifty-one percent (51%) of which are either taken by low to moderate income persons or considered available to low to moderate income persons. Applies to economic development projects with the purpose of creating/retaining permanent jobs. Does not apply to community development projects with the purpose of providing a service to the community or limited clientele, such as a community center, child day care facility or a senior center. In counting jobs, the following applies:
(1.) Part-time jobs must be converted to full-time equivalents.

(2.) Only permanent jobs count. Temporary jobs may not be included.

(3.) Seasonal jobs may be counted only if the season is long enough for the job to be considered as the employee's principal occupation.

(4.) All permanent jobs created by the activity must be counted even if the activity has multiple sources of funding.

(5.) Jobs created indirectly by an assisted activity may not be counted.

(6.) As a general rule, jobs from different businesses may not be aggregated. However, in certain cases such as where CDBG funds are used to acquire, develop, or improve real property, (e.g., a business incubator or an industrial park) jobs may be aggregated for all of the businesses locate on the property.

(7.) In any case where CDBG funds are used for public improvements (e.g., economic development infrastructure) jobs to be considered for meeting the job creation/retention requirement shall be all jobs created/retained by the business(es) originally assisted as well as any other business(es) that locates in the area within a period of one year following the completion of the funded activity. Except that, in any case where the amount of CDBG assistance provided for the public improvements in relation to the number of jobs projected to be created/retained by the originally funded business(es) is such that the amount per job does not exceed $10,000, jobs created by businesses that locate in the area and benefit from the improvements need not be considered.

(II) To qualify for job retention, there must be clear and objective evidence that permanent jobs will be lost without CDBG assistance. In addition, at least fifty-one percent (51%) of the jobs at the time the CDBG assistance is provided must be held by low to moderate income persons or the job can reasonably be expected to turn over within the following two years and that it will be filled by, or steps will be taken,
to ensure that it is made available to a low or moderate income person upon turnover.

(c) Activities aid in the prevention or elimination of slums or blight. To qualify under elimination of slums and blight, an application must demonstrate that the following criteria have been met. An activity may qualify on either an area basis or a spot basis.

(i) Elimination of slums and blight on an area basis:

(A) The area must be designated by the applicant and that area must meet a definition of a slum, blighted, deteriorated or deteriorating area under state or local law. (See Wyoming SS 15-9-101 to 15-9-137).

(B) Throughout the area there is a substantial number of deteriorated or deteriorating buildings or the public improvements are in a general state of deterioration.

(C) The project must address one or more of the conditions contributed to the deterioration of the area.

(ii) Elimination of slums or blight on a spot basis. To comply with the National Objective of slums or blight outside a designated slum or blighted area, a project must meet the following criteria:

(A) The project must be designed to eliminate specific conditions of blight or physical decay on a spot basis not located in a slum or blighted area; and

(B) The activity must be limited to acquisition, clearance, relocation, historic preservation or rehabilitation of buildings. Under this criterion rehabilitation is limited to the extent necessary to eliminate specific conditions detrimental to public health and safety.

(d) Activities designed to meet community development needs having a particular urgency. An activity will be considered to address this objective if the applicant certifies, and the state determines that:

(i) The activity is designed to alleviate existing conditions pose a serious and immediate threat to the health or
welfare of the community. For example, damage to a municipal sewer lagoon due to a flood.

(ii) The threat is one of recent origin or one recently became urgent. A condition will be considered to be of recent origin if it developed or became urgent within eighteen months preceding the certification by the applicant.

(iii) The applicant is unable to finance the activity on their own, and other sources of funding are not available.

(e) To qualify for National Objective #1, at least 51 percent of the persons benefiting from the project must be from low and moderate income households. However, applicants are cautioned that they must show that moderate income families are not being benefited to the exclusion of low income families. The state will use the HUD section 8 limits for each county. (See Attachment A for limits).

(f) The state must show that at least 70 percent of its total federal funds, by activity, benefit low to moderate income families. Therefore, applicants applying under the remaining National Objectives may not be funded if the statewide 70 percent minimum is not met.

Section 4. Eligible Activities.

(a) The eligible activities are restricted to projects meeting the criteria outlined in section 105(a) of the Housing and Community Development Act of 1974, as amended through 1992. Consistent with section 105(a), the following criteria shall be applied to determine eligible activities:

(i) The acquisition of real property (including air rights, water rights, and other interests therein) that are blighted, deteriorated, deteriorating, undeveloped, or inappropriately developed from the standpoint of sound community development and growth; appropriate for rehabilitation or conservation activities; appropriate for the preservation or restoration of historic sites, the beautification of urban land, the conservation of open spaces, natural resources, and scenic areas, the provision of recreational opportunities, or the guidance of urban development; to be used for the provision of public works, facilities, and improvements eligible for assistance under this title; or to be used for other public purposes;
(ii) The acquisition, construction, reconstruction, or installation (including design features and improvements with respect to such construction, reconstruction, or installation that promote energy efficiency) of public works, facilities (except for buildings for the general conduct of government), and sites or other improvements;

(iii) Code enforcement in deteriorated or deteriorating areas in which such enforcement, together with public or private improvements or services to be provided, may be expected to arrest the decline of the area;

(iv) Clearance, demolition, removal, and rehabilitation (including rehabilitation promotes energy efficiency) of buildings and improvements (including interim assistance, and financing public or private acquisition for rehabilitation, and rehabilitation, of privately owned properties and including the renovation of closed school buildings);

(v) Special projects directed to the removal of material and architectural barriers restrict the mobility and accessibility of elderly and handicapped persons;

(vi) Payments to housing owners for losses of rental income incurred in holding for temporary periods housing units to be utilized for the relocation of individuals and families displaced by activities under this title;

(vii) Disposition (through sale, lease, donation or otherwise) of any real property acquired pursuant to this title or its retention for public purposes;

(viii) Provisions of public services, including but not limited to those concerned with employment, crime prevention, child care, health, drug abuse, education, energy conservation, welfare or recreation needs, if such services have not been provided by the unit of general local government (through funds raised by the such unit, or received by such unit from the state in which it is located) during any part of the twelve-month period immediately preceding the date of submission of the statement with respect to those funds that are to be made available under this title, and are to be used for such services, unless the secretary of HUD finds that the discontinuation of such services was the result of events not within the control of the unit of general local government,
except that not more than 15 percent of the amount of any assistance to a unit of general local government (or in the case of non-entitled communities not more than 15 percent statewide) under this title including program income may be used for activities under this paragraph unless such unit of general local government used more than 15 percent of the assistance received under this title for fiscal year 1982 or fiscal year 1983 for such activities (excluding any assistance received pursuant to Public Law 98-8), in which case such unit of general local government may use not more than the percentage or amount of such assistance used for such activities for such fiscal year, whichever method of calculation yields the higher amount;

(ix) Payment of the non-federal share required in connection with a federal grant-in-aid program undertaken as part of activities assisted under this title;

(x) Payment of the cost of completing a project funded under title I of the Housing Act of 1949;

(xi) Relocation payments and assistance for displaced individuals, families, businesses, organizations, and farm operations, when determined by the grantee to be appropriate;

(xii) Activities necessary (A) to develop a comprehensive community development plan, and (B) to develop a policy-planning-management capacity so that the recipient of assistance under this title may more rationally and effectively (I) determine its needs, (II) set long-term goals and short-term objectives, (III) devise programs and activities to meet these goals and objectives, (IV) evaluate the progress of such programs in accomplishing these goals and objectives, and (V) carry out management, coordination, and monitoring of activities necessary for effective planning implementation;

(xiii) Payment of reasonable administrative costs related to establishing and administering federally approved enterprise zones and payment of reasonable administrative costs and carrying charges related to the planning and execution of community development and housing activities, including the provision of information and resources to residents of areas in which community development and housing activities are to be concentrated with respect to the planning and execution of such activities, and including the carrying out of activities as described in section 701(e) of the Housing Act of 1954 on the
date prior to the date of enactment of the Housing and Community Development Amendments of 1981; and

(xiv) Provision of assistance including loans (both interim and long term) and grants for activities are carried out by public or private nonprofit entities, including (A) acquisition of real property; (B) acquisition, construction, reconstruction, rehabilitation, or installation of (I) public facilities (except for buildings for the general conduct of government), site improvements, and utilities, and (II) commercial or industrial buildings or structures and other commercial or industrial real property improvements; and (C) planning;

(xv) Assistance to neighborhood-based non-profit organizations, local development corporations, non-profit organizations serving the development needs of the communities of non-entitlement areas, or entities organized under section 301(d) of the Small Business Investment Act of 1958 to carry out a neighborhood revitalization or community economic development or energy conservation project in furtherance of the objectives of section 101(c), and assistance to neighborhood-based non-profit organizations, or other private or public non-profit organizations, for the purpose of assisting, as part of neighborhood revitalization or other community development, the development of shared housing opportunities (other than by construction of new facilities) in which elderly families (as defined in section 3(b)(3) of the United States Housing Act of 1937) benefit as a result of living in a dwelling in which the facilities are shared with others in a manner that effectively and efficiently meets the housing needs of the residents and thereby reduces their cost of housing;

(xvi) Activities necessary to the development of energy use strategies related to recipient's development goals, to assure that those goals are achieved with maximum energy efficiency, including items such as --

(A) An analysis of the manner in, and the extent to, energy conservation objectives will be integrated into local government operations, purchasing and service delivery, capital improvements, budgeting, waste management, district heating and cooling, land use planning and zoning, and traffic control, parking, and public transportation functions; and
(B) A statement of the actions the recipient will take to foster energy conservation and the use of renewable energy resources in the private sector, including the enactment and enforcement of local codes and ordinances to encourage or mandate energy conservation or use of renewable energy resources, financial and other assistance to be provided (principally for the benefit of low and moderate income persons) to make energy conserving improvements to residential structures, and any other proposed energy conservation activities.

(xvii) Provisions of assistance to private, for-profit entities, when the assistance is appropriate to carry out an economic development project, (that shall minimize, to the extent practicable displacement of existing businesses and jobs in neighborhoods) that --

(A) Creates or retains jobs for low and moderate income persons;

(B) Prevents or eliminates slums and blight;

(C) Meets urgent needs;

(D) Creates or retains businesses owned by community residents;

(E) Assists businesses that provide goods or services needed by, and affordable to, low and moderate income residents; or

(F) Provides technical assistance to promote any of the activities under subparagraphs (A) through (E);

(xviii) The rehabilitation or development of housing assisted under section 17 of the United States Housing Act of 1937;

(xix) Provision of assistance to facilitate substantial reconstruction of housing owned and occupied by low and moderate income persons (A) where the need for reconstruction was not determinable until after rehabilitation under this section had already commenced, or (B) where the reconstruction is part of a neighborhood rehabilitation effort and the grantee (I) determines the housing is not suitable for rehabilitation, and (II) demonstrates to the satisfaction of the
secretary of the Department of Housing and Urban Development (HUD) that the cost of substantial reconstruction is significantly less than the cost of new construction and less than the fair market value of the property after substantial reconstruction;

(xx) Provision of technical assistance to public or nonprofit entities to increase the capacity such entities to carry out eligible neighborhood revitalization or economic development activities, assistance shall not be considered a planning cost as defined in paragraph (xii) or administrative cost as defined in paragraph (xiii);

(xxi) Housing services, such as housing counseling, energy auditing, preparation of work specifications, loan processing, inspections, tenant selection, management of tenant-based rental assistance, and other services related to assisting owners, tenants, contractors, and other entities, participating or seeking to participate in housing activities authorized under this section, or under title II of the Cranston-Gonzalez National Affordable Housing Act, except that, activities under this paragraph shall be subject to any limitation on administrative expenses imposed by any law;

(xxii) Provision of assistance by recipients under this title to institutions of higher education having a demonstrated capacity to carry out eligible activities under this subsection for carrying out such activities;

(xxiii) Provision of assistance to public and private organizations, agencies, and other entities (including nonprofit and for-profit entities) to enable such entities to facilitate economic development by;

(A) Providing credit (including providing direct loans and loan guarantees, establishing revolving loan funds, and facilitating peer lending programs) for the establishment, stabilization, and expansion of micro enterprises;

(B) Providing technical assistance, advice, and business support services (including assistance, advice, and support relating to developing business plans, securing funding, conducting marketing, and otherwise engaging in micro enterprise activities) to owners of micro-enterprises and persons developing micro-enterprises; and
(C) Providing general support (such as peer support programs and counseling) to owners of micro-enterprises and persons developing micro-enterprises;

(xxiv) Activities necessary to make essential repairs and to pay operating expenses necessary to maintain the habitability of housing units acquired through tax foreclosure proceedings in order to prevent abandonment and deterioration of such housing in primarily low and moderate income neighborhoods; and

(xxv) Provision of direct assistance to facilitate and expand home ownership among persons of low and moderate income (except that such assistance shall not be considered a public service for purposes of paragraph (viii) by using such assistance to:

(A) Subsidize interest rates and mortgage principal amounts for low and moderate income home buyers;

(B) Finance the acquisition by low to moderate income homebuyers of housing that is occupied by the homebuyers;

(C) Acquire guarantees for mortgage financing obtained by low and moderate income homebuyers from private lenders (except that amounts received under this title may not be used under this subparagraph to directly guarantee such mortgage financing and grantees under this title may not directly provide such guarantees);

(D) Provide up to 50 percent of any down payment required from low or moderate income homebuyers; or

(E) Pay reasonable closing costs (normally associated with the purchase of a home) incurred by a low or moderate income home buyer.

Section 5. Eligible Costs.

(a) Administrative costs incurred in carrying out the program must not exceed 15 percent of the total program or project cost (20 percent for housing rehabilitation). Eligible administrative costs are defined as follows: Payment of reasonable administrative costs and carrying charges related to the planning and execution of community development activities financed in whole or in part with funds from this program.
General management, supervision and coordination, reasonable costs of overall program management, coordination, monitoring and evaluation, and similar costs associated with carrying out the overall project. Such costs include but are not limited to: salaries, wages, and related costs of the applicant's staff and the staff of local public agencies engaged in general management, coordination, monitoring and evaluation, travel costs incurred for official business in carrying out the project, administrative services performed under third-party contracts or agreements, including such services as general legal services and accounting services; and other costs for goods and services as rental and maintenance of office space, insurance, utilities, office supplies and rental of office equipment.

Section 6. Ineligible Costs.

(a) No costs may be paid with this program's funds that were incurred prior to the Wyoming Business Council and the city/town or county signing the grant agreement, including but not limited to: preparing the application, travel, per diem and other expenses related to delivering or preparing the application; architectural engineering or planning costs to prepare specifications, plans, maps, etc.; site work such as soil surveys, surveying, etc.; attending or holding public hearings or workshops.

Section 7. Data Requirements.

(a) Data used to support an application must be from either federal or state sources to insure consistency among all applicants. The source of the data must be cited in the application. However, applicants may use data derived at the city or county level if they can satisfy staff of the Wyoming Business Council, that the data is accurate and will not give the applicant an unfair advantage over other applicants. The methodology used, sample size, data sources, etc., must be submitted to Wyoming Business Council with the application if other than federal or state information is used.

Section 8. Citizen Participation.

(a) Applicants are required to solicit citizen input through a properly publicized public hearing before submission of an application. For the purposes of this program seven (7) days is the minimum period for notification of a hearing date.
The hearing must inform citizens of the dollar amount available, dollar amount requested, the range of allowed activities, and other pertinent information. The intent of this process is to obtain citizen input, not to tell the citizens what the elected officials have already decided. However, the elected officials may inform the public if a specific project is contemplated, such as projects under chapters two and five. Minutes of the public hearing must be part of the application.

A grant may be awarded only if the applicant certifies that it has:

(i) Provided for and encouraged citizen participation, with particular emphasis on participation by persons of low and moderate income who are residents of slum and blight areas and of areas in which CDBG funds are proposed to be used;

(ii) Provided citizens with reasonable and timely access to local meetings, information, and records relating to the local governments proposed and actual use of funds;

(iii) Provided for technical assistance to groups representative of persons of low and moderate income that request such assistance in developing proposals with the level and type of assistance to be determined by the grantee;

(iv) Provided for public hearings to obtain citizen views and to respond to proposals and questions at all stages of the community development program, including at least the development of needs, the review of proposed activities, and review of program performance, these hearings shall be held after adequate notice at times and locations convenient to potential or actual beneficiaries, and with accommodation for the handicapped;

(v) Provided for a timely written answer to written complaints and grievances, within 15 working days where practicable; and

(vi) Identified how the needs of non-English speaking residents will be met in the case of public hearings where a significant number of non-English speaking residents can be reasonably expected to participate. Identified how the needs of handicapped/disabled individuals will be met in the case of public hearings.
Section 9. Housing and Community Development Plan.

(a) The Housing and Urban-Rural Recovery Act requires that grantees will identify their short and long terms goals for housing needs and community development, including low-moderate income needs, and the activities to address those needs, before any funds can be disbursed. Any reasonable plan will be accepted until the state has specific guidelines from HUD. In addition to the above items, the plan must also contain:

(i) A plan to minimize displacement of citizens with CDBG funds;

(ii) A plan to assist displaced persons should there be any;

(iii) A plan to affirm fair housing;

(iv) Data supporting housing needs and goals.

(b) The plan should be simple and reasonable, taking into account the limited resources and personnel available to the cities, towns, and counties. However, it should be a useful document.

Section 10. Audit.

(a) An annual audit is required for review by the Wyoming Business Council and a proportionate share of the cost of the audit may be paid for out of CDBG funds. All audits must follow the "single audit concept" of OMB Circular A-133.

Section 11. Federal Requirements.

(a) Applicants must be aware of all applicable federal requirements before they apply for funding. Attached are regulations may involve your project and with witch you will be required to comply. See Attachment B.

Section 12. Program Income.

(a) All income derived from the program may be re-used by the grantee upon receiving approval of the use of the funds from the Wyoming Business Council before disbursement. The Wyoming Business Council shall require each grantee to disburse its program income prior to requesting additional funds from the
Wyoming Business Council to finance the same type of project from which the program income was derived.

Section 13. State Historic Preservation Office.

(a) Section 106 of the National Historic Preservation Act requires that cultural resources must be considered when federally funded projects are undertaken. Only if the following types of projects are being undertaken, must the applicant consult with SHPO prior to submittal of an application:

(i) Any project located in a National Register Historic District.

(ii) Buildings over forty years old.

(iii) Projects involve previously undisturbed land and raw land developments.

(b) This provision does not require the applicant to receive SHPO clearance prior to submitting an application, but rather is intended to inform the applicant of the SHPO procedures that will be required if a grant award is made.


(a) For public improvement projects, the grantee cannot recover any capital cost by assessing any amount against property owned and occupied by low and moderate income persons, including fees or assessments charged as a condition of obtaining access to such public improvements. This applies to water and sewer tap fees and local improvement district assessments. However, the costs are recoverable if:

(i) The CDBG funds received are used to pay the proportion of such fee or assessment that relates to the capital costs of the public improvements that are financed from revenue sources other than under this title;

(ii) For purposes of assessing any amount against properties owned and occupied by persons of low and moderate income who are not persons of very low income, the grantee certifies to the state that it lacks sufficient CDBG funds to comply with requirements of subparagraph (i).
Section 15. Lump Sum Drawdown.

(a) Lump sum drawdowns, other than for housing rehabilitation programs, cannot be made to any grantee until: (i) applicant has a signed contract with recipient; (ii) applicant has an executed loan agreement; and (iii) funds are actually required by the recipient to meet disbursement needs.

(b) Recipients may not place funds in an interest bearing account for more than three days. This rule applies to all CDBG funds except those placed in a housing rehabilitation construction escrow account. Housing rehabilitation projects using lump sum drawdowns must make substantial disbursements within 180 days of the drawdown.

Section 16. Timely Progress.

(a) Timely progress of the project and a good faith effort of the grantee will be required in all contracts. Planning Only and Technical Assistance grant contracts must be signed by the local government within forty-five (45) days of the award. Economic development infrastructure, downtown development and job training contracts must be signed within three (3) months. Community development project contracts must be signed within six (6) months. Failure to comply with these deadlines may result in the termination of the award by the Wyoming Business Council.

Section 17. Project Completions.

(a) If circumstances arise that a project as applied for cannot be completed with available CDBG funds, the grantee will be required to complete the project with its own funds or reimburse the CDBG program.

Section 18. Minority Business Enterprise.

(a) The subgrantee must keep a file on its minority business efforts, both in trying to attract minority businesses as bidders and the number of minorities hired on the project. This is not a requirement to hire a minimum number of minorities, but an effort to see they have the opportunity to participate.

(a) Federal law requires the procurement of professional services be on a competitive basis when procurement is being undertaken by a governmental or non-profit entity. Therefore, grantees will be required to send out a request for proposal (RFP) for professional services. This insures you are paying a competitive price for those services.

(b) If the CDBG grant is on behalf of a for-profit business, the standard procurement regulations do not apply if the for-profit directly pays for the services. The bidding process should be encouraged but is not required.


(a) Funds that are returned to the Wyoming Business Council from contract terminations or that are not expended by a project shall be awarded to new projects that are funded to complete the same type of activity that the original grant was funded to complete. Example: If a community development project does not expend the entire award, the remaining balance will be allocated to a new community development project when the awards for those grants take place. Recaptured economic development funds would be awarded to new economic development grants.

Section 21. Unobligated Funds.

(a), All unobligated funding from previous program year allotments will be allocated to the Community Development Program's allocation.

(b) The Wyoming Business Council may take action to allocate a portion of the unobligated economic development project funds as described in Section V.A.2. Program Budget, of the Wyoming Consolidated Plan, to community development as described in Chapter 4. The amount to be reallocated will be at the discretion of the Wyoming Business Council, based on anticipated demand for Economic Development funds.

Section 22. Complaint Procedures.

(a) Citizens have the right to offer their views at any point during the development and implementation of a Community Development Block Grant (CDBG) project. Any comments, suggestions, criticisms or complaints made by a citizen must be
taken seriously and responded to promptly. Written complaints and grievances should be responded to within fifteen (15) working days of their receipt where practicable. Telephoned or oral complaints should also have a prompt response documented.

(b) When a citizen wishes to voice an opinion concerning a project, they should first voice their comments to the local government. If the local government is prompt with an adequate response, the process usually ends at this point. A slow or inadequate response may result in the complaint being filed with the Wyoming Business Council, the governor, the U.S. Department of Housing and Urban Development, or a member of Wyoming's congressional delegation.

(c) The normal procedure, if a complaint is filed with any of the above referenced entities, is for the staff of the Wyoming Business Council to refer the complaint back to the local officials for a response. The Wyoming Business Council will not dictate the form or manner of the response to local officials, but will be available to advise the community regarding applicable federal and state requirements that may be at question. In all cases the final resolution of the complaint is the authority and responsibility of the local grant recipient. When the grant recipient has reached a decision as to whether or how the complaint is to be resolved, the Wyoming Business Council will communicate the local government's decision to the agency or office originally referred it to them for action.

(d) Records of all citizen comments, whether in the form of letters or written notes summarizing telephoned or oral comments, should be placed in the citizen participation file for the project, along with the community's letter of reply or notes indicating how the grant recipient responded to the comment. Federal regulations require that the project completion report prepared by the grantee for project closeout include a summary of each citizen comment regarding the project, along with an assessment of the comment and a description of any action taken in response to the comment.

Section 23. Reallocation of Additional HUD Funds.

(a) In the event HUD allocates additional funds to the program, those funds will be split among the grant categories proportionate to the current distribution.
Section 24. Program Income Returned to the Wyoming Business Council

(a) All income derived from the program may be re-used for any eligible activity allowed by the state of Wyoming CDBG program.
CHAPTER 2
ECONOMIC DEVELOPMENT

Section 1. Goals.

(a) Goal 1. To provide for the creation and retention of permanent primary jobs that are above the current average wage, and aid in the diversification of the Wyoming economy.

(b) Goal 2. To encourage the leveraging of public and private economic development dollars through the incentive of money available through the CDBG program.

Section 2. Benefit to Low and Moderate Income Individuals.

(a) In order for CDBG funds to be used for any economic development projects wishing to be funded under the national objective of benefit to low and moderate income persons, it must be documented that no fewer than 51 percent of the jobs to be created will be given to individuals from low to moderate income households. Appendix A includes the household income for each county that qualifies a person as low to moderate income. It should be noted that the amounts shown under household size reflect the amount of income from all income-earning members of the household at the time employment begins. For example: If a company in Albany county employs a person from a household of two individuals, it cannot be assumed that as long as they pay the individual less than $38,500 per year the benefit to low/moderate income individuals has been met. If the other individual inhabiting the household is employed and earning $20,000/year and the person they wish to hire is also employed and earning over $18,500 per year, there has not been any benefit to low/moderate income individuals if the individual is hired. If the person the company wishes to hire is unemployed, the total household income is then considered to be $20,000 and they may hire the individual, pay him or her whatever they wish, and conclude that the benefit to low to moderate income individuals requirement has been met. It is imperative, therefore, that the company carefully screen and document each potential employee to be benefited by CDBG assistance.

Section 3. Funding Cycles and Application Approval.

(a) Requests for planning only grants, technical assistance grants, job training grants, downtown development grants,
infrastructure grants, convertible loans, float loans, and Section 108 loans will be accepted and scheduled for final review and award by the Wyoming Business Council. The Wyoming Business Council will meet approximately quarterly. If funds from any program year are totally obligated, the Wyoming Business Council may make contingent awards based upon special or emergency circumstances and pending the receipt of future program year funds.

Section 4. Applicant's Contribution.

(a) The sponsoring public entity is responsible for all administrative duties and must provide an individual who will be responsible for seeing all contract agreements are met.

Section 5. Ineligible Activities.

(a) The following activities have been determined to be ineligible for economic development assistance because they have been determined to provide insufficient public benefit:

(i) General promotion of the community as a whole, as opposed to the promotion of specific areas and programs.

(ii) Assistance to professional sports teams.

(iii) Assistance to privately owned recreational facilities that serve a predominately higher income clientele, where the recreational benefit to users and members clearly outweighs employment or other benefits to low and moderate income persons.

(iv) Acquisition of land for which the specific proposed use has not yet been identified.

(v) Assistance to a for-profit business while that business or any other business owned by the same person(s) or entity(ies) is the subject of unresolved findings of noncompliance relating to previous CDBG assistance.

Section 6. Downtown Development

(a) Funds have been set aside to assist local governments fund projects located in their downtown area. Assistance in the area can be any eligible activity, however, it is anticipated
projects will generally include assistance for public facilities, rehabilitation of commercial buildings, historic preservation, and land acquisition and clearance.

(b) Generally, downtown projects will be fundable under the National Objective of elimination of slums and blight and job creation and retention for low to moderate income persons. However, some projects may qualify under another National Objective.

(c) Requirements that must be addressed in the application:

(i) Description of the project.

(ii) Detailed project budget.

(iii) Information adequate to demonstrate compliance with a national objective.

(iv) Duration of the project.

(v) Completeness of the project, including other sources of funding.

(vi) Adequate information to evaluate the project against the numerical rating system.

(vii) When required evidence that the SHPO was contacted and consulted and a brief narrative of the results of the consultation. (See Chapter 1, Section 13)

(viii) An assessment of probable operation and maintenance costs of the facility or site improvement(s) to be constructed using CDBG funds, and an explanation of how those costs will be funded.

(ix) A narrative explanation of how the project will either directly or indirectly provide for the creation and retention of permanent primary jobs that are above the current average wage, and aid in the diversification of the Wyoming economy.
(d) In determining the process for selection of projects, the Wyoming Business Council staff will evaluate each application for completeness based upon the requirements listed previously. In order for a project to be considered by the Wyoming Business Council, the application must be rated according to the numerical system below and must receive a minimum of 75 points.

(e) Downtown development numerical rating:

(i) Job creation -- Emphasis is placed upon projects that create/retain jobs. Projects that propose to create jobs directly shall receive 25 points. A project that can demonstrate the capability for indirect job creation/retention will receive a total of 15 points.

(ii) Organization -- This measures the applicants commitment to downtown development. The application should describe how the community is actively organized to plan and implement downtown development projects. Communities that can demonstrate the existence of a viable downtown organization actively involved in the promotion and development of the downtown shall receive 25 points. Applicants that do not have an active downtown organization shall receive 15 points.

(iii) Integrated Effort -- Projects indicate financial support for the project from other sources will be given preference over those have no other source of financing. Any application that documents financial support (cash) from another source in the amount of twenty-five percent (25%) or more of the total project costs shall receive 25 points. An application with less than twenty-five percent (25%) shall receive 15 points.

(iv) Potential economic benefit -- It is important to demonstrate the overall economic boost that would accrue to a community if the grant is awarded. Special emphasis will be given to those projects located in areas that are severely economically distressed. Applicants, who are located in areas where the current unemployment rate exceeds the state average, shall receive 25 points. Applicants located in other areas shall receive 15 points.
(f) Other review criteria:

(i) When reviewing projects the Wyoming Business Council may give favorable consideration to projects can demonstrate, 1) significant private sector investment into the project, 2) additional economic activity in the community, 3) historic value, and 4) broad based participation and support by the community.

(ii) The Wyoming Business Council may not approve a proposal if the applicant cannot demonstrate how the project would either directly or indirectly create or retain jobs in the community.

(g) A maximum of $500,000 per grant will be allowed.

Section 7. Infrastructure Economic Development Grants.

(a) Funds have been set aside for economic development infrastructure grants. The Wyoming Business Council will award all grants. Such grants will allow communities to purchase and/or improve sites for the benefit of a specific identified business project.

(b) The primary intent of this program is to provide funds to local governments to pay for services that the entity normally provides to a business at a certain cost. Normally, this involves sewer and water lines, fire protection, power lines, roads, public access, etc. Funding to purchase buildings and/or land is eligible, but only if the local government intends to maintain ownership of the property. The government entity could lease the property to the business for a nominal amount, or could negotiate a lease/purchase agreement with the company. The program does not intend, however, for local government to purchase land and/or a building to give to a business entity.

(c) Requirements that must be addressed in the application:

(i) Funds will be used only for site purchase or site improvements. A detailed description of the proposed use of the funds, a map of the site, explanation of ownership, and an expert and concise cost estimates must be provided.
(ii) The business(es) to be benefited must submit a business plan and current financial statements to the Wyoming Business Council. The grant may be denied if the business is not determined to be viable.

(iii) In the event that no new jobs are planned to be created, documentation must be provided that demonstrates at least 51 percent of the current employees are from low/moderate income households. It must also be documented that the existing jobs will be lost if the grant is not approved and the improvement completed.

(iv) If the business is new, there must be signed commitments by the business that their relocation or expansion will occur. A list by job titles and annual income of all new jobs to be created must be submitted.

(v) The business must certify that at least 51 percent of all new jobs created will be given to low/moderate income individuals.

(vi) A copy of the sponsoring applicant's resolution and the certification of citizen participation (see Chapter 1, Section 2 and 8) must be submitted.

(vii) A statement of proposed impact upon the community.

(viii) Documentation by the community that no other funding source exists.

(ix) Certification by the local government and the business that in the event the business does not locate on the improved site, all grant funds will be returned to the state.

(x) When required evidence that the SHPO was contacted and consulted and a brief narrative of the results of the consultation. (See Chapter 1, Section 13)

(xi) An assessment of probable operation and maintenance costs of the facility or site improvement(s) to be constructed using CDBG funds, and an explanation of how those costs will be funded.
(xii) A narrative explanation of how the project will either directly or indirectly provide for the creation and retention of permanent primary jobs that are above the current average wage, and aid in the diversification of the Wyoming economy.

(d) Minimum threshold requirements

(i) In determining the selection of projects, the each application will be reviewed for completeness based upon the requirements listed previously. In order for a project to be considered by the board, the application must be determined to be complete and must receive a minimum of sixty (60) points, of which at least twenty (20) must come from the cost per job category. A total of one hundred (100) points are possible. Each application will be rated to determine the amount of points to be awarded by using the numerical system that follows:

(A) Cost per job - If the CDBG total cost of the project is $5,000 or less per retained or newly created job, a total of 35 points will be awarded. $10,001 to $15,000 per job will receive 30 points. An expenditure/job ratio between $15,001 to $25,000 will be 25 points; and $25,001 to $35,000 will be 20 points. If the total cost of the project exceeds $35,000 per job, then zero (0) points will be awarded.

(B) Potential economic benefit - it is important to demonstrate the overall economic boost that would accrue to a community if the grant is awarded. Special emphasis will be given to those projects located in areas that are severely economically distressed. Applicants who are located in areas where the current unemployment rate exceeds the state average, shall receive 35 points. Applicants located in other areas shall receive 25 points.

(C) Integrated effort - projects that indicate financial support from other sources will be given preference over those that have no other source of financing. Any application that documents financial support (cash) from another source in the amount of ten percent of the total project costs shall receive 30 points. An application with a minimum of five percent shall receive 15 points. An application with less than five percent shall receive 5 points.

(e) A maximum of $500,000 per grant will be allowed.
Section 8. Planning Only Grants.

(a) Funds have been set aside for planning only grants. Planning grants will be available to local governments and non-profit entities to perform feasibility studies related to increased economic development and community development. However, non-profit start-ups in the very early stages of development may be referred to other programs. To be considered for such a grant, it is necessary to have a resolution of endorsement passed by the sponsoring entity and certification of public participation through the public hearing process. (See Chapter 1, Sections 2 and 8). There are three types of planning grants available:

(i) Community Development and Economic Development plans, $50,000 maximum award with 20% required match. Preference will be given to communities with current plans seven years old or older.

(ii) Housing plans, assessments or development codes which will benefit low and moderate income people, $20,000 maximum award with a 25% cash match

(iii) Feasibility studies and site specific development studies that may create job opportunities for low and moderate income people or otherwise benefit low and moderate income people, $15,000 maximum award with a 25% cash match

(b) To be eligible for consideration, each planning only grant must demonstrate a 25 percent "hard dollar cash" match is obligated to eligible project costs. The 25 percent match will be applied to the total project costs.

(c) Each APPLICATION must also address the following requirements:

(i) Description of the project;

(ii) Impact on the community;

(iii) Duration of the project;

(iv) Number of potential jobs to be created or retained;

(v) Detailed budget for amount requested;
(vi) Desired results;

(vii) Principals involved;

(viii) National Objective involved (see Chapter 1, Section 3);

(ix) Existing non-profits must furnish three years of financial statements and their current business plan;

(x) New non-profits must furnish three years of pro-forma financial information and their business plan;

(xi) Consulting work must be obtained from a qualified, disinterested third party;

(xii) APPLICANT MUST DEMONSTRATE METHODOLOGY FOR FUNDING IMPLEMENTATION OF THE PROJECT.

(xiii) A narrative explanation of how the project will either directly or indirectly provide for the creation and retention of permanent primary jobs that are above the current average wage, and aid in the diversification of the Wyoming economy.

(xiv) Planning grants must demonstrate the potential for compliance with a national objective.

(d) Ineligible activities for planning grants.

(i) Payment of costs associated with the implementation of:

(A) Marketing studies/strategies.

(B) Feasibility studies.

(C) Targeted industry studies.

(D) Economic development plans.

(ii) Payment of reproduction costs of any promotional materials.
(iii) Payment of salary costs of local government or non-profit organization employees.

(iv) Payment of travel costs for anyone other than consultants.

(e) Grant numerical rating system. In determining the process for selection of the projects, the Wyoming Business Council staff will evaluate each application for completeness based upon the requirements listed previously. In order for a project to be considered by the Wyoming Business Council, the application must be determined to be complete and must also receive a minimum of sixty (60) points from a total of one hundred (100) points available. Each application will be rated to determine the amount of points to be awarded by using the numerical system that follows.

(i) Planning only grant numerical rating system.

(A) Job creation - Emphasis is placed upon the projected number of jobs created/retained should the results of the study prove positive. Projects that propose to create an amount of jobs directly shall receive 35 points. A project that can demonstrate a potential for indirect job creation will receive a total of 25 points.

(B) Integrated effort - Projects that indicate financial support from other sources will be given preference over those that have no other source of financing. Any application that documents financial support (cash) from other sources for a minimum of 40 percent of total eligible project costs shall receive the maximum of 35 points. Applications that document financial support in the amount of 30 percent to 39 percent of the total eligible project costs shall receive 30 points. A project that indicates only the required 25 percent match from other sources, shall receive 25 points.
(C) Potential economic benefit - It is important to demonstrate the overall economic boost that would accrue to a community or region if the results of the study were implemented. Special emphasis will be given to those projects located in areas that are severely economically distressed. Applications that document intent to implement a project in areas where the current unemployment rate exceeds the state average, shall receive a maximum of 30 points. Projects located in other areas shall receive 20 points.

(D) Additional review criteria:

(I) It is important that project developers have a clear view of how study findings will be implemented and financed. Therefore, when reviewing and approving proposals the Wyoming Business Council will give favorable consideration to projects that: (1) involve municipalities and organizations that have a track record of success, as well as the personnel and resources in place for project implementation, (2) have funds available and dedicated for implementation of study recommendations, and (3) have identified capable developers committed to implementation of study recommendations.

(II) The Wyoming Business Council may not approve a proposal if the applicant cannot demonstrate how the project would either directly or indirectly create or retain jobs in the community.


(a) Funds have been set aside for technical assistance grants. Technical assistance grants will be available to for-profit or non-profit enterprises wishing to start, expand, or retain existing businesses. However, business start-ups in the very early stages of development may be referred to other programs. A maximum of $7,500 per technical assistance grant will be allowed. To be considered for such a grant, it is necessary to have a resolution of endorsement passed by the sponsoring entity and certification of public participation through the public hearing process. (See Chapter 1, Sections 2 and 8).

(b) To be eligible for consideration, each technical assistance grant application must demonstrate a 25 percent "hard dollar cash" match is obligated to eligible project costs. The
25 percent match for technical assistance grants must originate from the benefiting business or a private investor. The 25 percent match will be applied to the total project costs.

(c) Each APPLICATION must also address the following requirements:

(i) Description of the project;

(ii) Impact on the community;

(iii) Duration of the project;

(iv) Number of potential jobs to be created or retained;

(v) Detailed budget for amount requested;

(vi) Desired results;

(vii) Principals involved;

(viii) National Objective involved (see Chapter 1, Section 3);

(ix) Existing businesses must furnish three years of financial statements and their current business plan;

(x) For new businesses, the principals must furnish current financial information on themselves and three years of pro-forma financial statements for the project;

(xi) Consulting work must be obtained from a qualified, disinterested third party. APPLICANTS FOR TECHNICAL ASSISTANCE GRANTS ARE ENCOURAGED TO NAME THEIR CONSULTANT AT THE TIME OF APPLICATION;

(xii) APPLICANT MUST DEMONSTRATE METHODOLOGY FOR FUNDING IMPLEMENTATION OF THE PROJECT.
(xiii) A narrative explanation of how the project will either directly or indirectly provide for the creation and retention of permanent primary jobs that are above the current average wage, and aid in the diversification of the Wyoming economy.

(d) Eligible activities for technical assistance. The purpose of technical assistance grants are to assist for-profit businesses to conduct project planning and research. Only project development costs are allowed, costs associated with project implementation are not eligible. For example, costs for the preparation of a marketing study are allowed, however, the costs to implement the study are not. Using this example such costs as salespersons salaries or commissions, cost of printing promotional brochures and travel costs associated with selling the product are not allowed. It is not the intent of the Technical Assistance grant program to infuse capital to pay for the costs of selling or manufacturing a new product, but rather to help pay the costs associated with research and development of new products and markets.

(i) Payment of costs associated with the development of:

(A) Business plans.

(B) Marketing studies/strategies consultation.

(C) Feasibility studies.

(D) Prototype development and testing.

(E) Packaging design consultation.

(F) Marketing, sales and cash flow management consultation.

(ii) Technical assistance grants must demonstrate the potential for compliance with a national objective.

(e) Ineligible activities for technical assistance Grants.

(i) Payment of costs associated with the implementation of:
(A) Business plans.
(B) Marketing strategies.
(C) Feasibility studies.

(ii) Payment of the salary costs of business principals or their employees.

(iii) Payment of travel costs for anyone other than consultants.

(iv) Payment of patent and copyright fees.

(f) Technical assistance numerical rating. In determining the process for selection of the projects, the Wyoming Business Council staff will evaluate each application for completeness based upon the requirements listed previously. In order for a project to be considered by the Wyoming Business Council, the application must be determined to be complete and must also receive a minimum of sixty (60) points from a total of one hundred (100) points available. Each application will be rated to determine the amount of points to be awarded by using the numerical system that follows. In addition, applications requesting a technical assistance grant must receive at least ten (10) points in the job creation category in order for the application to be considered by the board.

(i) Proposed action - Emphasis is placed upon the probability of the project’s implementation. If businesses can demonstrate the commitment of funds from programs whose purpose is to bring new products into the marketplace, a maximum of 35 points will be awarded. Businesses that are either already in production or have secured necessary production financing will also receive a maximum of 35 points. Businesses requiring assistance to retain existing jobs will also be eligible for 35 points. If the applicant is a private individual or group intending to start a new business, the sum of 20 points shall be awarded. Existing businesses that desire expansion, but are only in the process of formulating a concept, will also receive 20 points.

(ii) Job creation - Emphasis is placed upon the projected number of jobs created/retained should the results of the study prove positive. Projects that propose to create 1 to
4 jobs shall receive 10 points. Projects that propose to create 5 to 10 jobs shall receive 20 points. Projects that propose to create 11 to 15 jobs shall receive 25 points and projects creating over 15 jobs shall receive 35 points. Applicants are requested to be conservative in estimating job creation since the rationale for the projections will be questioned.

(iii) Potential economic benefit - It is important to demonstrate the overall economic boost that would accrue to a community or region if the results of the study were implemented. Special emphasis will be given to those projects located in areas that are severely economically distressed. Applications that document intent to implement a project in areas where the current unemployment rate exceeds the state average, shall receive a maximum of 30 points. Projects located in other areas shall receive 20 points.

(A) Additional review criteria:

(1) It is important that project developers have a clear view of how study findings will be implemented and financed. Therefore, when reviewing and approving proposals the Wyoming Business Council will give favorable consideration to projects that: (1) involve companies that have a track record of success, as well as the personnel and resources in place for project implementation, (2) have funds available and dedicated for implementation of study recommendations, and (3) have identified capable developers committed to implementation of study recommendations.

(2) The Wyoming Business Council may not approve a proposal if the applicant cannot demonstrate how the project would either directly or indirectly create or retain jobs in the community.

Section 10. Job Training Grants.

(a) Funds have been set aside for job training grants. Job training grants will be available to for-profit and non-profit entities that can demonstrate the need for specially trained employees in their workplace. To be considered for such a grant, it is necessary to have a resolution of endorsement passed by the sponsoring entity and certification of public participation through the public hearing process. (See Chapter
1, Section 2 and 8). Applicants are urged to contact the University of Wyoming or their local community college when preparing the training curriculum to determine ways to utilize resources available at these institutions.

(b) To be eligible for consideration, each grant application must contain the following:

(i) A detailed budget.

(ii) Explanation of why specialized training of employees is required.

(iii) Documentation that qualified workers do not exist in the community.

(iv) An explanation of why CDBG funds are necessary.

(v) Complete description of the proposed training curriculum complete with the name(s) of the individuals that will conduct the training. Resumes or qualifications statements must be included.

(vi) A list of each job classification/position that will require utilization of CDBG training funds that includes:

(A) Brief job description.

(B) Educational/job experience requirements.

(C) Salary range.

(vii) A plan of action by the business for solicitation and validation of low to moderate income workers.

(viii) A narrative explanation of how the project will either directly or indirectly provide for the creation and retention of permanent primary jobs that are above the current average wage, and aid in the diversification of the Wyoming economy.

(c) Eligible expenditures of job training Funds
(i) Instructor salaries. This does not include the salary of the owners or other company personnel.

(ii) Training materials and supplies.

(iii) Tuition costs.

(iv) Travel associated with training.

(v) Training system design.

(vi) Leasing of training equipment.

(d) Ineligible Expenditures of Job Training Funds

(i) Purchase of training equipment.

(ii) Payment of employee salaries that are receiving training.

(e) In determining the process for selection of the projects, the Wyoming Business Council staff will evaluate each application for completeness based upon the requirements listed previously. In order for a project to be considered by the Wyoming Business Council, the application must be rated according to the numerical system below and must receive a minimum of 60 points.

(f) Job training grant numerical rating system.

(i) Businesses proposing to train for "primary" jobs will receive 25 points. Businesses proposing to train for "secondary" jobs shall receive 10 points. "Primary jobs" are positions that provide goods and services that are primarily exported from the state, that gain market share from imports to the state, or that meet an unmet need in the area and result in the creation of new wealth. Primary jobs are derived from businesses that bring new income into an area, stimulate other local businesses, or assist a community to diversify and stabilize its economy. "Secondary jobs" are those that provide goods and services primarily in their local areas. The jobs created are in response to other business activity in the area, and would be lost if the local population decreased. The jobs do not create new income, but redistribute income in the local area.
(ii) Integrated effort - Projects that indicate financial support from other sources will be given preference over those that have no other source of financing. Any application that documents financial support (cash) from other sources for a minimum of 40 percent of total eligible project costs shall receive the maximum of 35 points. Applications that document financial support in the amount of 30 percent to 39 percent of the total eligible project costs shall receive 30 points. A project with a 20 percent to 29 percent cash match from other sources, shall receive 25 points. Projects with less than a 20 percent cash match, shall receive zero (0) points.

(iii) Potential economic benefit - It is important to demonstrate the overall economic boost that would accrue to a community or region if the results of the study were implemented. Special emphasis will be given to those projects located in areas that are severely economically distressed. Applications that document intent to implement a project in areas where the current unemployment rate exceeds the state average, shall receive a maximum of 30 points. Projects located in other areas shall receive 20 points.

(g) A maximum of $100,000 per job training grant will be allowed.

Section 11. Transfer of Funds.

(a) Should the funding demands from local governments exceed the available funds allocated to each of the economic development funding categories, the Wyoming Business Council may reallocate funds without amending the rules. This rule only applies to realloacting funds between downtown development, infrastructure grants, planning only grants, technical assistance grants and job training grants.

Section 12. Float and Section 108 Loan Guarantees.

(a) The Wyoming Business Council will accept economic development loan applications from qualified applicants under the CDBG float activity and the HUD administered section 108 loan guarantee program. A business must apply through an incorporated local government for assistance under the float program and the section 108 program.

(b) Float loans involve the use of CDBG funds for an
economic development loan that will generate program income in time to carry out other activities listed in these rules. Use of this procedure is based on the premise that the later activities do not require funds immediately and that the recipient's (state) letter of credit will therefore contain a balance (the "float") that can be used on a temporary basis. Float loans shall be due on demand.

(c) The Section 108 Loan Guarantee program represents an activity where the Wyoming Business Council will accept applications directly from incorporated local governments on behalf of an eligible project. If approved, the Wyoming Business Council will then pledge future CDBG allocations as a guarantee to the loan, and submit the application to HUD for approval. As repayment is made by the borrower to HUD, the Wyoming Business Council’s pledge amount will be decreased accordingly. The Wyoming Business Council may pledge up to an amount not to exceed five times the amount of the most recent CDBG grant received by the Wyoming Business Council. If a borrower defaults on a loan, the Wyoming Business Council will forfeit a portion of its future CDBG allocations. The term of a section 108 loan guarantee shall not exceed twenty (20) years.

(d) The minimum amount to be requested for a float or section 108 loan guarantee will be $350,000 and the maximum will be $1,500,000. These limits can be modified only in writing by the Chief Executive of the Wyoming Business Council. Interest rates for both will be based on the amount the company is able to pay and the public benefit to be derived.

(e) Applicants for float loans must be able to secure an unconditional and irrevocable letter of credit, drawn against a sound and acceptable financial institution payable to the Wyoming Business Council before CDBG funds will be disbursed. The purpose of the letter of credit is for the Wyoming Business Council to draw against in the event paybacks are delayed or the borrower has defaulted.

(f) Activities that are eligible for payment from either program are:

(i) Acquisition of real property.

(ii) Building construction.
(iii) Site improvements.

(iv) Acquisition or rehabilitation of machinery and equipment necessary for the operation of the project.

(v) Acquisition, rehabilitation and leasehold improvements of an existing facility.

(vi) Payment of professional fees -- surveying, appraising, engineering, architectural, legal, accounting and closing costs. All fees must be determined to be legal and reasonable.

(vii) Working capital needs of the project.

(g) Minimum threshold requirements for applications requesting either a float loan or a section 108 loan guarantee are:

(i) At least 51 percent of the jobs created or retained must be available to low and moderate income persons. Applicants should propose methods to ensure preferential recruitment, hiring and training of Wyoming workers, particularly those of low and moderate income (see Attachment A). Applicants must take into consideration equal opportunity and non-discrimination laws to ensure that women and minorities are not excluded from participation, denied the benefit of or subjected to discrimination under any program or activity funded in whole or in part with CDBG funds. Successful applicants will be required to comply with equal opportunity and non-discrimination laws and regulations. Or,

(ii) The elimination of slum and blight conditions is specified in Title I of the Housing and Community Development Act of 1974, as amended through 1992.

(iii) The use of CDBG funds for economic development loans must be determined to be appropriate to the project. Applicants must clearly demonstrate the need for the CDBG assistance by documenting that a financial gap exists in funding the proposed project. It could also be considered appropriate to invest CDBG funds into a project that can obtain total private sector funding, but the returns to the for-profit are inadequate to motivate an "economic person" to proceed with the project. In either case, it is incumbent upon the applicant
to indicate that the project cannot be developed in the absence of federal loan funds.

(iv) Business plan. Applicants must submit a business plan along with their standard application form. The business plan must reflect:

(A) A description of the business;

(B) Qualifications of management;

(C) A market investigation; and other documentation of financial feasibility as appropriate;

(D) Three-year financial statements including balance sheets, income statements;

(E) Cash flow projections for at least three years;

(F) Cost quotes for all project costs.

(v) A list of each job classification/position that will be created by the project that includes:

(A) A brief job description;

(B) Educational/job experience requirements;

(C) Salary range;

(D) Hours worked per week/months worked per year.

(vi) Evidence that the SHPO was contacted and consulted and a brief narrative of the results of the consultation. (See Chapter 1, Section 13)

(h) Potential applicants are requested to contact this office previous to application submission for additional information requirements.
(i) An administrative fee not greater than one percent (1%) of the loan principal may be charged each successful applicant to assist in defraying the local government's expenses of analyzing the loan applications.

Section 13. Convertible Loan Program

(a) The WBC will accept economic development convertible loan applications for businesses only from qualified applicants. Only incorporated cities, towns or counties are qualified applicants. A business must apply through a city, town or county for assistance under the convertible loan program. The WBC will grant funds to the local government who will in turn loan the funds to a for-profit business. A portion of the loan may be converted to a grant, if during a designated period of time, as determined by the WBC, the business creates new jobs. The terms, interest rate, and amount of the loan to be converted to a grant shall be determined by the WBC. Generally the amount converted will be $500 per each new job created.

(b) No funds are allocated to this program category, but rather funds may be redirected to the convertible loan category upon council approval, from any CDBG economic development category. Maximum amount per each application shall be $150,000. Minimum amount per each application shall be $10,000.

(c) Activities eligible for funding from the convertible loan program:

   (i) Acquisition of real property.

   (ii) Building construction.

   (iii) Site improvements.

   (iv) Acquisition or rehabilitation of machinery and equipment necessary for the operation of the project.

   (v) Acquisition, rehabilitation and leasehold improvements of an existing facility.

   (vi) Payment of professional fees -- surveying, appraising, engineering, architectural, legal, accounting and closing costs. All fees must be determined to be legal and reasonable.
(vii) Working capital needs of the project.

(d) Compliance with national objective: At least 51 percent of the jobs created must be available to low and moderate income persons. Applicants should propose methods to ensure preferential recruitment, hiring and training of Wyoming workers, particularly those of low and moderate income.

(e) Any application submitted must contain the following information:

(i) Business plan. Applicants must submit a business plan that contains:

(A) A description of the business;

(B) Qualifications of management;

(C) A market investigation; and other documentation of financial feasibility as appropriate;

(D) Three-year financial statements including balance sheets, income statements;

(E) Cash flow projections for at least three years;

(F) Cost quotes for all project costs.

(ii) A list of each job classification/position that will be created by the project that includes:

(A) A brief job description;

(B) Educational/job experience requirements;

(C) Salary range;

(D) Hours worked per week/months worked per year;

(E) Time frame in which the jobs will be created;

(f) Guidelines for evaluating projects.
(i) Project costs and financial guidelines; these guidelines are to insure:

(A) That project costs are reasonable;

(B) That all sources of project financing are committed;

(C) That to the extent practicable, CDBG funds are not substituted for non-federal financial support;

(D) That the project is financially feasible;

(E) That to the extent practicable, the return on the owner=s equity investment will not be unreasonably high; and

(F) That to the extent practicable, CDBG funds are distributed on a pro rata basis with other funds provided to the project.

(ii) Public benefit: The grantee is responsible for making sure that a minimum level of public benefit is obtained from the expenditure of CDBG funds under this program. The amount of CDBG assistance cannot exceed $50,000 per full time equivalent job created.

(g) Management capacity: Applicants must demonstrate capacity to plan, administer, and service the proposed project, manage the budget, maintain adequate financial records, maintain required project records, submit reports, and meet the proposed timetable for completion. Management capacity is important for the success of a program.

(h) Use of program income: All income derived from the program--principal and interest payments--may be retained by the local government, and re-used for any eligible activity allowed by the state of Wyoming CDBG program.
CHAPTER 3 (REPEALED)
CHAPTER 4
COMMUNITY DEVELOPMENT PROGRAM

Section 1. Goals.

(a) Goal 1. To expand housing opportunities for low/moderate income households.

   (i) Objective 1. Provide appropriate housing for special population groups such as the frail, elderly and handicapped/disabled, that support an appropriate level of independent living.

   (ii) Objective 2. Provide support for the development of emergency shelters, transitional housing and permanent housing for the homeless.

(b) Goal 2. Improve the condition of low and moderate income groups, especially vulnerable to adverse economic or social conditions.

   (i) Objective 1. Provide centers for employment, education, etc., and centers for the elderly.

   (ii) Objective 2. Provide operational funds for public services that directly impacts upon economic, housing, and/or social conditions of low/moderate income residents for programs not currently funded by local government.

(c) Goal 3. To improve community infrastructure by eliminating health, safety, and welfare problems.

(d) Goal 4. To allow each local government to determine their own serious problem and to be competitive with all other applicants.

   (i) Objective 1. Allow any application eligible under Chapter 1, Section 4. It should be emphasized that the applicants in this category bear the burden of demonstrating to the Wyoming Business Council the seriousness of their selected activity.

Section 2. Eligible Activities.

(a) Any project listed in Chapter 1, Section 4, is eligible
for funding under this portion of the program.

Section 3. Low Priority Activities.

(a) The following activities are considered very low priority under this program, and are not likely for funding.

(i) Planning not directly part of a CDBG project;

(ii) Grants for profit-making organizations.

Section 4. Type and Size of Grants.

(a) The maximum grant size for community development public infrastructure and public facilities grant will be $500,000. The maximum award for public accessibility grants will be $300,000.

Section 5. Deadlines.

(a) All applications must be postmarked no later than the date the Wyoming Business Council sets for receiving applications. One original and two copies must be sent to:

(i) Wyoming Business Council, Investment Ready Communities Division, 214 West 15th Street, Cheyenne, WY 82002.

Section 6. Previous Grantees.

(a) Previous grantees must demonstrate that satisfactory performance has been accomplished under previous grants. The Wyoming Business Council will primarily use the HUD Performance Reports or Wyoming Business Council monitoring results in their review.

Section 7. Project Categories.

(a) The community development program has three project categories that applicants may apply under. They are:
(i) Removal of architectural barriers that restrict the mobility and accessibility of elderly and handicapped persons to existing publicly-owned buildings, facilities and improvements. Preference will be given to buildings, facilities and improvements that are directly accessed and used by the public.

(ii) Construction, rehabilitation, reconstruction, or installation of public infrastructure such as water and sewer lines and systems, streets, curbs, gutters, and sidewalks. This does not include centers for the elderly, handicapped or developmentally disabled. These projects are to be submitted under the other eligible activities category.

(iii) All other eligible activities as described in Chapter 1, Section 4. Eligible Activities.

(b) Projects will be ranked against one another within each project category. The amount of funds allocated to each project category will be determined based on the dollar amount requested in each category compared to the total dollar amount requested by all grant proposals, with the resulting percentage applied to the funds allocated to the community development portion of the program. For example, if the dollar amount requested under all other eligible activities category represents twenty-five percent (25%) of all funds requested under the community development portion of the program, then twenty-five percent (25%) of all community development funds will be allocated to that project category. Only eligible projects will be considered when making this determination. At the time of final approval, the Wyoming Business Council may reallocate funds to another project category in order to fully fund a proposal.

Section 8. Ranking Criteria -- (Used only in ranking Community Development Projects).

(a) The Wyoming Business Council is required to spend at least 70 percent of its funds for low-moderate income projects (see Chapter 1, Section 3). Only projects that can show that at least 51 percent of the individuals benefiting from the project belong to low-moderate households, can be considered as low-moderate income projects. Conversely, none of the funds in a project that has 50 percent or less direct beneficiaries from low to moderate income households would count toward the state
total. The only exception is direct benefit projects such as housing rehabilitation, that count only the actual amount given to low-moderate households.

(b) In an effort to maximize the primary objectives of the program, all applications will be judged against one another, within project category, regardless of which of the objectives in Chapter 1, Section 3 are chosen. Additionally, applications will be ranked together regardless of type of jurisdiction (city, town or county) or size.

(c) Consequently, when the final ranking of the projects has been done, the highest ranking low-moderate income projects will be funded until the 70 percent threshold has been achieved. The Wyoming Business Council will then go back to the top of the list and fund the projects that use the other two national objectives.

(d) The staff of the Wyoming Business Council will be responsible for the ranking process and subsequent recommendations to the Wyoming Business Council. The Wyoming Business Council will make the final review and announcement of grant recipients.

(e) Three components make up the program factors. They include:

(i) Program assessment.
   (A) Seriousness of problem 150 points
   (B) Urgency of problem 75 points
(ii) Integrated effort 50 points

(f) Program assessment:

(i) Program assessment will be divided into two separate parts: need and urgency. Points will be awarded to each part based on the applicant's abilities to document the seriousness of their need(s) and the urgency of the project.

(ii) Applicants will be asked to document their needs and to describe how well proposed activities address those needs. In doing so, the applicant should describe the relationship between the needs and the proposed activities in specific measurable terms.
(iii) In addressing urgency, applicants must be able to verify the immediate need to remedy their problem including concurrence from appropriate sources. Applicants should describe the consequences if proposed activities are not implemented within the stated program timetables.

(iv) In evaluating the impact of the above sections on a particular project, consideration will be given to:

(A) The amount of funds requested in relation to the benefits of the expenditures.

(B) The results to be achieved.

(C) Additional actions that may be required to meet identified needs.

(D) Previous actions taken to address the identified needs.

(E) Consistency of project with local long range community and economic development plans.

(v) Points will be awarded under program assessment in the following manner:

(A) Substantial impact
   Need: 130 to 150 maximum
   Urgency: 60 to 75 maximum

(B) Moderate impact
   Need: 80 to 100
   Urgency: 30 to 50

(C) Minimal impact
   Need: 30 to 50
   Urgency: 10 to 25

(D) Insignificant impact
   Need: -0-
   Urgency: -0-

(vi) Definitions of impact are as follows:
(A) Substantial impact: The applicant has clearly documented an urgent need that is a very serious one in nature and to which the situation warrants immediate attention. Proposed activities will resolve the problem to a greater extent than other proposals designed to meet similar needs, in relation to the amount requested.

(B) Moderate impact: The application has documented a less than critical need to which action should be taken sometime in the near future. Activities will have a direct impact on resolving the identified problems that adversely affect the community.

(C) Minimal impact: The applicant has documented a need, but is less severe and requires action to be taken when appropriate. The activities will help to somewhat alleviate the identified problem.

(D) Insignificant Impact: The applicant has failed to clearly address a specific need and consequently requires no action to be taken. The activities will fail to solve the problem to any extent.

(g) Integrated Efforts - 50 points.

(i) Applicants will be asked to describe how well their projects are combined with the other programs to solve a specific problem area. Emphasis will be placed on utilization of funds from other sources to combine with CDBG monies, or cooperation between various groups. Points will be awarded for integrated efforts in the following manner:

(A) Substantial impact - 50 points.

(I) The activities support and are necessary to other activities that, in combination, will have a direct and significant impact in alleviating or eliminating the major problem addressed.

(B) Moderate impact - 35 points.

(I) The application supports other activities or programs and evidences some improvement of related problems.

(C) Minimal impact - 15 points.
(I) The applicant barely supports other activities or programs.

(II) Applicants demonstrating no support from other sources will receive zero (0) points.

Section 9. Minimum Submission Requirements of all Community Development Applications.

(a) All applications must contain the following:

(i) A cover sheet containing the name of the applicant, contact persons, project title, proposed funding level, other sources of funds and expected start-up and completion dates.

(ii) A narrative describing:

(A) The problem to be solved;

(B) The National Objective being supported (See Chapter 1, Section 3);

(C) A description of the proposed project designed to solve the problem, including previous efforts to solve the problem;

(D) The extent to which the proposal constitutes a completed project;

(E) The project location, including a suitable map;

(F) The expected time frame, by phases, necessary to initiate and complete the project; and

(G) A statement indicating how the project is consistent with local long range community and economic development plans.

(iii) A detailed budget, including costs and the source of all funding.

(iv) A preliminary floor plan and cost estimate of the construction to be funded with CDBG funds should be included.
The floor plan and cost estimate should be prepared by a person possessing adequate skill to prepare such plans and cost estimates.

(v) Information concerning how and when the housing and community development plan and other certifications outlined in Chapter 1, Section 9, will be completed.

(vi) Certification of public participation through the public hearing process (See Chapter 1, Sections 2 and 8).

(vii) When required evidence that the SHPO was contacted and consulted and a brief narrative of the results of the consultation. (See Chapter 1, Section 13)

(viii) Narrative describing the applicant's grant management experience or how they expect to provide for the management and administration of the grant if they do not have administrative capacity.

(ix) An assessment of probable operation and maintenance costs of the facility or site improvement(s) to be constructed using CDBG funds, and an explanation of how those costs will be funded.

(x) A narrative explanation of how the project will either directly or indirectly provide for the creation and retention of permanent primary jobs that are above the current average wage, and aid in the diversification of the Wyoming economy.

(xi) For non-city, non-town and non-county projects, must submit financial statements covering the most recent three year period.

Section 10. Lien Requirement.

(a) A lien in favor of the Grantee (city/town/county) will be placed by the Grantee on any building in an amount equal to the CDBG investment in the building. The lien shall be for a period of five (5) years after the administrative closeout of the grant. No CDBG funds shall be disbursed until a copy of the lien has been properly filed and recorded and a copy of that lien received by the WBC.
CHAPTER 5
IMMINENT THREAT GRANTS

Section 1. Imminent Threat Grants

(a) Upon approval and an emergency declaration by the governor, funds may be allocated from any program category at any time to fund eligible activities that will alleviate an imminent threat to public health or safety that requires immediate resolution and that is of recent origin. A condition will be considered of recent origin if it developed or became urgent within 18 months preceding the application by the community. The imminent threat must be a catastrophic or emergency situation that creates an impending or immediate threat, danger or peril to human health and safety. Situations that result from neglect or lack of maintenance or have gradually become urgent are not considered imminent threats. The grant amount shall not exceed $250,000. Imminent threat grants are funded under National Objective # 3, "Activities designed to meet community development needs having a particular urgency" (See Chapter 1, Section 3) and therefore must meet the criteria of that objective.

(b) Any application submitted under this chapter must contain the following:

(i) A cover sheet containing the name of the applicant, contact person, project title, proposed funding level, other sources of funds, and expected start-up and completion dates.

(ii) Documentation concerning the nature and degree of seriousness of the condition requiring assistance.

(iii) Evidence that the CDBG activity is designed to address the imminent threat.

(iv) Information on the timing of the development of the serious condition.

(v) Evidence confirming that the grantee is unable to finance the project on its own, and that other financial resources to alleviate the problem are not available.

(vi) The project location, including a suitable map.
(vii) A detailed budget, including a cost estimate of the activity to be funded with CDBG funds, and the source of all other funding.

(viii) Certification of public participation through the public hearing process (See Chapter 1, Sections 2 and 8).

(ix) An assessment of probable operation and maintenance costs of the facility or site improvement(s) to be constructed using CDBG funds, and an explanation of how those costs will be funded.

(c) The Wyoming Business Council staff shall review the application and make a recommendation to the Wyoming Business Council that shall review the proposal and make a recommendation to the governor. The governor shall make the final decision whether to approve or deny the application.
APPENDIX “A”

Income limits will be posted annually on the Wyoming Business Council Website.
APPENDIX “B”

FEDERAL REQUIREMENTS

If awarded CDBG funds Grantee acknowledges and consents to, and will comply with the following:

A. Grantee is authorized and hereby consents to accept the jurisdiction of the Federal courts for the purpose of enforcement of its responsibilities as such an official and Grantees responsibilities under the Grant Agreement.

B. The Community Development Block Grant program has been developed so as to give maximum feasible priority to activities that will benefit low and moderate income families, or aid in the prevention or elimination of slums or blight.

(The requirement for this certification will not preclude WBC from approving a pre-application where the Grantee certifies, and WBC determines, that all or part of the community development program activities are designed to meet other community development needs having a particular urgency as specifically explained in the pre-application)

C. Grantee will consent to assume the status of a responsible Federal Official under the National Environmental Policy Act of 1969, 42 U.S.C. ' 4321 et seq. (NEPA), insofar as the provisions of Act apply to the Wyoming Small Communities Block Grant Program.

D. Grantee will, in connection with its performance of environmental assessments under NEPA, comply with Section 106 of the National Historic Preservation Act of 1966, 16 U.S.C. ' 470); Protection and Enhancement of the Cultural Environment, Exec. Order No. 11,593, 36 Fed. Reg. 8921 (1971), and 36 C.F.R. ' 800.8 by consulting with the Wyoming State Historic Preservation Officer to identify properties listed in or eligible for inclusion in the National Register of Historic Places that are subject to adverse effects by the proposed activity.

E. Grantee will comply with the regulations, policies, guidelines and requirements of 24 C.F.R. ' 85, as they relate to the acceptance and use of Federal funds and will comply with all requirements imposed by WBC concerning special requirements of law, program requirements, and other administrative requirements.

F. Grantee will administer and enforce the labor standards requirements set forth in the Davis-Bacon Act, 40 U.S.C. ' 276a, Contract Work Hours and Safety Standards Act, 40 U.S.C. " 327-32, the Anti-Kickback Act of 1986, 41 U.S.C. " 51-58, and regulations issued to implement such requirements, as each may be amended from time to time.


H. Grantee will comply with the flood insurance purchase requirement of Section

APPENDIX B-1
102(a) of the Flood Disaster Protection Act of 1973, 42 U.S.C. '4001 et seq., that requires the purchase of flood insurance in communities where such insurance is available as a condition for the receipt of any federal financial assistance for construction or acquisition purposes for use in any area, that has been identified by the Secretary of the Department of Housing and Urban Development as an area having special flood hazards. The phrase "federal financial assistance" includes this Grant.

I. Grantee will, pursuant to the Architectural Barriers Act of 1968, 42 U.S.C. '4151, et seq., require every building or facility (other than a privately owned residential structure) designed, constructed or altered with funds provided under this part to comply with the "American Standard Specifications for Making Buildings and Facilities Accessible to and Useable by the Physically Handicapped", Number A117.1-1961, subject to the exceptions contained in 41 C.F.R. '101-17.703. Grantee will be responsible for conducting inspections to insure compliance with these specifications by its contractor(s).

J. Grantee will comply with:

(1) The Civil Rights Act of 1964, 42 U.S.C. 2000 et seq., and the regulations issued pursuant thereto including 24 C.F.R. '1, that provides that no person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to any discrimination under any program or activity for which the Grantee receives Federal financial assistance and will immediately take any measures necessary to effectuate this assurance. If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Grantee, this assurance shall obligate and bind the Grantee, or in the case of any transfer of such property, any transferee, to comply with such laws and regulations for the period during which the property or structure is used for the purpose for which the Federal financial assistance is extended, or for other purposes involving the provision of similar services or benefits.

(2) The Civil Rights Act of 1968, 42 U.S.C. '3604-3606, administering all programs and activities relating to housing and community development in a manner to affirmatively further fair housing in the sale or rental of housing, the financing of housing, and the provision of brokerage services.

K. Grantee will:


(2) Provide relocation payments and offer relocation assistance as described in Section 205 of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 to all persons displaced as a result of acquisition of real property for an activity assisted under the Wyoming CDBG Program. Such payments and assistance shall be provided in a fair and consistent and equitable manner that insures that the relocation process does not result in
different or separate treatment of such persons on account of race, color, religion, national origin, sex, or source of income.

(3) Assure that, within a reasonable period of time prior to displacement, comparable decent, safe and sanitary replacement dwellings will be available to all displaced families and individuals and that the range of choices available to such persons will not vary on account of their race, color, religion, national origin, sex or source of income.

L. Grantee will comply with the provisions of the Hatch Act, as amended, which limits the political activity of employees.

M. Grantee will give WBC and HUD, through any authorized representatives, access to and the right to examine all records, books, papers, or documents related to the Grant.

N. Grantee will insure that the facilities under its ownership, lease or supervision which shall be utilized in the accomplishment of the Project are not listed on the Environmental Protection Agency's (EPA) list of Violating Facilities and that it will notify HUD of the receipt of any communication from the Director of EPA Office of Federal Activities indicating that the facility to be used in the Project is under consideration for listing by the EPA.

0. Grantee will comply with the provisions of 42 U.S.C. '4831, regarding the use and removal of lead-based paints.

P. Grantee will, with any housing rehabilitation program, implement the provisions of Section 39, Energy Conservation Standards, of the Housing and Urban Development Act, Pub. L. No. 89-117, 79 Stat. 451 (1965), as is practical and possible in the rehabilitation of any residential structures, and will adopt and implement a housing rehabilitation standard.

Q. Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. '794 and the regulations issued pursuant thereto 24 C.F.R. '8), which provide that "No otherwise qualified individual with disabilities in the United States shall solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

R. Grantee certifies that the unit of local government participating in this CDBG Agreement and/or Contract for Services is or will be following a detailed citizen participation plan that satisfies the requirements of 24 C.F.R., ' 570.486.

S. Grantee certifies that the unit of local government participating in this CDBG Agreement and/or contract for services has identified its community development and housing needs, including the needs of low and moderate income families, and the activities to be undertaken to meet these needs.

T. Grantee certifies that the unit of local government participating in this CDBG Agreement and/or contract for services will not attempt to recover any capital costs of public improvements assisted with CDBG funds including Section 108 loan guaranteed funds by assessing any amount against properties owned and occupied by persons of low and moderate

APPENDIX B-3
income, including any fee charged or assessment made as a condition of obtaining access to such public improvements. However, if CDBG funds are used to pay the proportion of a fee or assessment that relates to the capital costs of public improvements (assisted in part with CDBG funds) financed from other revenue sources, an assessment or charge may be made against the property with respect to the public improvements financed by a source other than CDBG funds. Grantee will not attempt to recover any capital costs of public improvements assisted with CDBG funds, including Section 108, unless CDBG funds are used to pay the proportion of a fee or assessment attributable to the capital costs of public improvements financed from other revenue sources. In this case, an assessment or charge may be made against the property with respect to the public improvements financed by a source other than CDBG funds. Also, in the case of properties owned and occupied by moderate-income (not low-income) families, an assessment or charge may be made against the property for public improvements financed by a source other than CDBG funds if the jurisdiction certifies that it lacks CDBG funds to cover the assessment.

U. Grantee certifies that the unit of local government participating in this CDBG Agreement and/or contract for services has adopted and is enforcing:

(1) A policy prohibiting the use of excessive force by law enforcement agencies within its jurisdiction against any individuals engaged in non-violent civil rights demonstrations; and

(2) A policy of enforcing applicable state and local laws against physically barring entrance-to or exit-from a facility or location which is the subject of such nonviolent civil rights demonstrations within its jurisdiction.

V. Grantee will comply with, certify to, and have a written policy in accordance with the Drug-Free Workplace Act of 1988 (Public Law 100-690), including but not limited to provisions of 24 C.F.R. ' 24(F), "Drug-Free Workplace Requirements", and 48 C.F.R. ' 23.5, "Drug-Free Workplace". Compliance includes, but is not limited to, the publication of a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in Grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition.

W. Grantee certifies that to the best of its knowledge and belief:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the unit of local government participating in this CDBG Agreement, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will
be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions; and

(3) It will require that the language of paragraphs 1 and 2 of this certification will be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

X. Grantee certifies that the activities to be undertaken with CDBG funds are consistent with the Strategic Plan incorporated within the State Consolidated Plan for Housing and Community Development.

Y. Grantee will comply with Section 3 of the Housing and Urban Development Act of 1968, and implementing regulations at 24 C.F.R. '135, Economic Opportunities for Low and Very Low Income Persons, as each may be amended.
STATE OF WYOMING

BUSINESS READY COMMUNITY GRANT AND LOAN PROGRAM

RULES

*Most recent amendments adopted October 29, 2010*

WYOMING BUSINESS COUNCIL
214 West 15\textsuperscript{th} Street
Cheyenne, Wyoming 82002
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State of Wyoming
Business Ready Community Grant and Loan Program
Rules

Chapter 1
GENERAL PROVISIONS

Section 1. **Purpose.**

(a) The purpose of the program is to promote economic development at the city, town and county level in order to improve economic health and a stronger state economy. These rules are adopted in order to implement W.S. 9-12-601 through 9-12-603, which provide for the making of grants and loans to eligible applicants for economic or educational development infrastructure. The rules provide for a method of application, review and recommendation, the establishment of terms and conditions of awards, and a hearing process.

(b) Guiding Principles of the Business Ready Community Program:

(i) Support to Wyoming's communities which are diverse in size, resources, and economies.

(ii) Focus Business Ready Community resources on projects that are likely to produce benefits that endure beyond the funding of the program.

(iii) Support projects which will help people, families and communities thrive.

(iv) Increase the capacity of community and economic development partnerships and cooperative efforts between the private and public sectors recognizing that each has its own responsibilities.

(v) Support and encourage communities that develop innovative responses to their economic challenges through a flexible review and recommendation process.

Section 2. **Authority.** Rule-making for this program is the responsibility of the Wyoming Business Council as authorized by W.S. 9-12-104(a)(iv) and W.S. 9-12-601.

Section 3. **Definitions.**

(a) “Community Development Organization” means a group of private citizens organized as a business entity authorized to do business in this state for the purpose of providing financing for new, existing or expanding businesses and other economic or community development purposes throughout its community or county and
which may take equity positions and shall take security positions in its borrower’s businesses and appropriate personal guarantees from the owners thereof.

(b) “Comprehensive Economic Development Strategy” or “CEDS” means a plan that emerges from a broad-based continuous planning process addressing the economic opportunities of a region.

(c) “Council” means the Wyoming Business Council Board of Directors.

(d) “Council staff” means the staff of the Wyoming Business Council assigned to administer the program.

(e) “Board” means the Wyoming State Loan and Investment Board.

(f) “Managed Data Center” means a center whose primary purpose is the centralized repository for storage, management, and dissemination of data and information for multiple businesses. This definition does not include spaces primarily for housing office computers, including individual workstations, servers associated with workstations, or small server rooms. For the purposes of these rules, the Council has adopted the Uptime Institute, Inc.’s four tiered classification approach to site power infrastructure.¹

(i) Tier IV data centers support companies with an international market presence delivering around the clock, year round services in a highly competitive market. Tier IV businesses are based on E-commerce, market transactions, or financial settlement processes. The businesses tend to be large, global companies spanning multiple time zones.

(ii) Tier III data centers support internal and external clients around the clock, year round such as service centers and help desks, but can schedule short periods when limited service is acceptable.

(iii) Tier II data centers are typically internet based companies without serious financial penalties for quality of service commitments, and small businesses whose information technology requirements are mostly limited to traditional normal business hours, allowing system shutdown during “off-hours”.

(iv) Tier I data centers are small businesses where information technology primarily enhances internal business process and whose web-presence is as a passive marketing tool. For example, internet based startup companies without quality of service commitments.

¹ The Uptime Institute, Inc.’s “Tier Classifications Define Site Infrastructure Performance” by W. Pitt Turner IV, P.E., John H Seader, P.E., and Kenneth G. Brill can be accessed at http://www.uptime.com/TUIpages/downloads/TUI705DTierClassification_WP.pdf
(g) “Eligible project costs” means total project cost, less ineligible project costs.

(h) “Ineligible project costs” may include, but not be limited to: appliances, equipment, furnishings and other features of the facility which are not physically attached.

(i) “Match” means cash and/or in-kind contributions. Contributions must have value and must be applicable to the period to which the matching requirement applies and must be necessary for the project. Examples of in-kind contributions include: labor, materials, and real estate. In-kind contributions must be verifiable from the records of applicant. These records must show how the value placed on in-kind contributions was derived. Labor services will be reported using rates consistent with those ordinarily paid by the applicant or other employers for similar work in the same labor market. Donated materials will be valued at market value at the time of donation. The value of donated buildings or land will be established using a market value set by an independent appraiser.

(j) "Multi-year project" means a large scale, stand alone project which will either be constructed over separate calendar years and which cannot be separated into smaller, independently operational phases, or for which the Council determines the project presents a unique economic development or business recruitment opportunity for the applicant and the state.

(k) "Phased projects" mean a project in which parts ("phases") are completed and fully functional before the entire project is built-out. For example, a business park that will eventually have twenty lots may be phased such that infrastructure will open up five lots at a time over four different phases. The first five lots can be occupied immediately upon completion of the infrastructure, and do not require completion of remaining three phases.

(l) “Primary jobs” means jobs created or retained by a business(es) that provides goods and services that are primarily exported from the state, that gain market share from imports to the state, or that meet an unmet need in the market area and result in the creation of new wealth.

(m) "Revenue generating project" means real property developed with Business Ready Community funds owned either by the applicant or created in partnership with a private party which generates revenue from user fees, assessments paid by the beneficiaries of the facility, lease payments, or the proceeds from the sale of real property.

(n) "Self-sufficiency wages" means a measure of how much income is needed for a family of a certain composition in a given place to adequately meet their basic needs including: housing, child care, food, transportation, health care, and taxes.
(o) “State Development Organization” means a corporation organized under W.S. 17-11-101 through 17-11-120 with the authority to provide financing for new, existing or expanding businesses, and to fulfill other economic or community development purposes throughout the state of Wyoming, and which may take equity positions and shall take security positions in its borrowers’ businesses and appropriate personal guarantees from the owners thereof.

(p) “Child Care / Senior Care Projects” are defined as “Business Committed” child care and senior projects that show significant need, demonstrate quality, and meet economic development goals within a community.

(q) “Main Street / Downtown Projects” are defined as “Community Readiness” projects located in the downtown and/or in a Main Street district that meet community economic development goals.

(r) “Special Assistance Loan Fund” is a special assistance loan fund that allows applicants to borrow funds in excess to the maximum award and/or borrow all or a portion of the required match.

Section 4. Eligible Applicants.

(a) A county, an incorporated city or town and joint powers board may apply for projects outlined in Chapter 2 Sections 1, 2 and 3. A joint powers board may apply with the approval of all participating agencies to the joint powers agreement.

(b) The Council may enter into a contract/cooperative agreement with the Eastern Shoshone Tribe or the Northern Arapaho Tribe in order to promote the purpose of this program and fund infrastructure projects outlined in Chapter 2 Sections 1, 2, and 3.

(c) A county, an incorporated city or town and joint powers board may contract with a Community Development Organization or a State Development Organization to use grant funds from an approved application.

(d) A county, an incorporated city, or an incorporated town may apply for a project outlined in Chapter 2 Section 4.

Section 5. Type of Projects. A grant may be made for the following types of projects.

(a) Business Committed Project:

(i) An infrastructure project where an applicant has a business committed to start-up, expand, locate or retain jobs in the community. The applicant must demonstrate that new primary jobs will be created or retained by the business, and that
the new jobs will be created at or above a self sufficient wage and/or improve community and economic capacity.

(ii) In addition to assisting a particular business, a business committed project may also fulfill the purpose of a Community Readiness Project.

(b) Community Readiness Project: No specific business is committed to expand or locate in the community. The community wants to build infrastructure to ready itself for new business development under a specific strategy or plan of action; for example, development of a business or industrial park, or facilities for labor force or entrepreneurial training. The applicant must demonstrate that the potential exists for the creation of new primary jobs.

(c) Community Enhancement Project: A project in which an applicant wants to improve the community’s aesthetic character or quality of life in order to make itself more attractive for business development under a specific strategy or plan of action; for example, landscaping, recreational or convention facilities. Landscaping and streetscaping enhancements must be located in commercial districts, sites of business activity, or in high visibility areas. Recreation, convention, or cultural centers must have a draw greater than the jurisdictional boundaries of the applicant.

(d) Managed Data Center Cost Reduction Project: This is a project in which an applicant wants to improve the development, recruitment, or expansion of data generation and information technology storage capabilities at a Tier II, Tier III or Tier IV level that are otherwise nonexistent or are in insufficient supply.

Section 6. Eligible Project Activities.

(a) For projects outlined in Chapter 2 Section 1, 2, and 3 the following are eligible project activities:

(i) Grant and loan funds may be used for an economic or educational development infrastructure project which may include, but not be limited to, water, sewer, streets and roads, telecommunications, airports, purchase of rights of way, purchase of land, buildings, facilities, industrial and business parks, industrial site or business district development, amenities within a business or industrial park, landscaping, recreational and convention facilities, and other physical projects.

(ii) Grant and loan funds may not be used for the rehabilitation or expansion of existing infrastructure unless the Council determines the rehabilitation or expansion is necessary to meet the purpose of the program.

(iii) Grant and loan funds may be used for the expansion of infrastructure previously funded under this program for phased projects.
(b) Grants for projects outlined in Chapter 2 Section 4 may be used for the 
reduction of the costs of electrical power, broadband, or both.

Section 7. **Ownership of Infrastructure.**

(a) The infrastructure funded by this program shall be owned by the applicant 
or an eligible Community Development Organization or State Development Organization 
as defined in Section 4 of this Chapter.

(b) The infrastructure or facility can be sold to a private entity without 
advertising the sale or calling for bids, provided that the applicant, makes a determination 
that the sale will benefit the economic development of the community, holds a public 
hearing, notice of which shall include the appraised value of all real properties involved 
and notice of proposed terms of any contract with a private entity and is published at least 
one each week for three (3) consecutive weeks in a newspaper of general circulation in 
the county in which the city or town is located. All sales must be done in accordance with 
all applicable statutes.

Section 8. **Revenue Generating Projects.** Revenue generated by the applicant or 
a private developer through publicly funded infrastructure projects must be recaptured by 
the applicant at a rate negotiated between the applicant and other partners and 
commensurate with the public investment.

Section 9. **Local Public Hearing and Approval.**

(a) An applicant is required to inform and educate the public and business 
community to the greatest extent possible about the proposed economic development 
project (including, but not limited to the economic development opportunity, possible 
funding sources and alternative solutions) utilizing a variety of techniques and media. 
The applicant must make readily available to the public access to the application and 
associated materials, exclusive of business plans or business financial information which 
are not subject to public information statutes. An applicant shall actively solicit citizen 
input which can be submitted via writing, electronically, or in person a public hearing. A 
minimum of one public hearing before submission of an application. For the purposes of 
this program seven (7) days is the minimum period for notification of a hearing date. 
Public notice shall be published in a newspaper of general circulation within the 
boundaries of the applicant or as approved by the council staff. If the project facility is to 
be located outside the boundaries of the applicant, the applicant shall hold an additional 
public hearing near the location of the proposed project facility. The notice shall contain 
a concise description of the proposed project and state that time will be set-aside at the 
public hearing to take testimony from citizens about the project.

(i) To inform the public and to gather information, any public hearing 
should at a minimum:

(A) Identify the economic development opportunity/ies
(B) Explore all possible funding sources and alternative solutions to the opportunity/ies

(C) Contain a comprehensive description of the proposed project

(D) Solicit testimony from citizens who may feel that the proposed use of the project might compete with an existing business.

(ii) For all Child Care Projects. In addition, child care project applicants must use their best efforts to notify all child care providers in the market area about the public hearing at least seven days in advance of the public hearing.

(b) An application must be accompanied by a description of the applicant’s public engagement process, written comments received by the applicant, evidence of the public hearing notification, minutes from the public hearing, and a signed resolution passed by the applicant or participating agencies to a joint powers board after the public hearing is held and public comments are considered.

Section 10. Funding Cycles.

(a) A grant and/or loan request for a “Business Committed” project outlined in Chapter 2, Section 1 will be accepted at any time by the Council staff and scheduled for review by the Council at any meeting. Funds may be set-aside with the amount to be determined by the Council. The purpose of the set-aside is to create a rapid response fund in order to react to an immediate opportunity when an applicant has a business committed to expand or locate. Available funds will be allocated to each award period as determined by the Council. A request will be scheduled for review by the Council.

(i) A grant and/or loan request for a “Business Committed” Child Care or Senior Care project will be accepted and funds awarded once a fiscal year on a date to be determined by the Council staff.

(ii) Requests by an eligible applicant for a “Business Committed” project and “Managed Data Center Cost Reduction Grant” which involve the same business must be submitted simultaneously.

(b) A grant and/or loan request for a “Community Readiness” project outlined in Chapter 2, Section 2 will be accepted and funds awarded twice a fiscal year on a date to be determined by the Council staff. Available funds will be allocated to each award period as determined by the Council. A request will be scheduled for review by the Council.

(i) A grant and/or loan request for a “Community Readiness” Main Street/Downtown project will be accepted and funds awarded once a fiscal year on a date to be determined by the Council staff.

(c) A grant and/or loan request for a “Community Enhancement” project outlined in Chapter 2, Section 3 will be accepted and funds awarded once a fiscal year on
a date to be determined by the Council staff. Available funds will be allocated to each award period as determined by the Council. A request will be scheduled for review by the Council.

(d) A grant and/or loan request for a “Managed Data Center Cost Reduction” project outlined in Chapter 2 Section 4 will be accepted at any time by the Council staff and scheduled for review by the Council at any meeting. Available funds will be allocated to each award period as determined by the Council. A request will be scheduled for review by the Council.

(e) An applicant may only submit one new grant or loan request per funding cycle for a “Community Readiness” or “Community Enhancement” project outlined in Chapter 2, Sections 2 or 3.

(f) An applicant may request, with a single application, grant or loan funds up to the annual maximum amount for a multi-year project for a period not to exceed three fiscal years. The applicant must demonstrate how the project meets the definition of a multi-year project.

Section 11. **Application Procedures.**

(a) The Wyoming Business Council Regional Director is available to assist applicants with the development of projects and preparation of applications. The Regional Director will use resources available such as the Department of Workforce Services and Wyoming’s Community Colleges to define available workforce training programs which could be used in conjunction with educational development infrastructure and/or the labor market/workforce portion of the application.

(b) An application shall be reviewed by the Council staff to determine eligibility and completeness. An application that is determined by the Council staff to be incomplete shall be provided an explanation of the findings in writing within fifteen (15) working days of its receipt where practical.

(c) The Council staff may engage a disinterested third party to validate a data center’s Tier Level, review a business plan, or examine other aspects of an application.

(d) An application that is complete shall be forwarded by the Council staff with a recommendation to the Council for their review.

(e) The Council staff shall publish statewide notice of Council and Board meetings at which Business Ready Grant and Loan Program applications will be discussed.

(f) The Council shall consider each application, allow for comments from the public, the applicant, and the Council staff, and refer to the Board the application with a recommendation.
(g) Under extraordinary circumstances the Council may recommend a waiver of rule requirements if the Council determines the waiver is consistent with the purpose of the Business Ready Community Program.

Section 12. Application Evaluation. Projects which will directly create jobs while adding capacity for future economic development will be given the highest priority. Lowest priority will be given to Community Enhancements and Child Care/Senior Care projects. In addition to the Guiding Principles for the Business Ready Community Program found in Section 1 of this Chapter, the Council may evaluate an application utilizing one or more of the following criteria and measures:

(a) The extent to which the project will increase the number of primary jobs;

(b) The extent to which the project will create jobs at or above self-sufficient wages or county mean or median wages;

(c) If the project is for social services, the demand for those services must be outpacing the existing supply of services causing a detriment to the ability of the applicant to develop its economy;

(d) The extent of private investment in capital equipment and/or facilities for a new or existing business. Preference will be given to projects leveraging private investment;

(e) The extent to which the total revenue for an existing business is increased;

(f) The extent to which the market share increases for an existing business as measured by units sold or some other measure that competitors in the market generally recognize as valid;

(g) The extent to which the total revenue or profit is greater than the rate of inflation in a retail business located in the community;

(h) The viability and thoroughness of a business plan which includes, at a minimum, a business description, management qualifications, market investigation, balance sheet, profit and loss for previous three years or tax returns for the previous three years, and cash flow projections for the next three years;

(i) The extent to which the project helps an applicant attract investment by new businesses and/or expand and retain existing business(es);

(j) The extent to which the project helps an applicant fulfill community development goals related to economic development;

(k) The extent to which the project helps an applicant diversify its economy;
(l) The extent to which the project builds upon a community's unique assets and characteristics to develop momentum in market niches;

(m) The extent to which the project helps the applicant grow the local workforce or expand entrepreneurial training;

(n) The viability and thoroughness of the recapture plan for revenue generating projects which will anticipate revenue streams and prioritize economic development initiatives to be paid for with the revenue while allowing the community flexibility to respond to opportunities;

(o) The extent to which the project involves the use of a general Business Ready Community loan for the request;

(p) The extent to which the project leverages funding. Leverage may include cash match, Business Ready Community loaned funds, or endowments to ensure long-term financial viability of the project.

(q) Satisfactory performance under previous grants awarded through this program.

(r) The extent to which the project will provide for the growth or recruitment of Tier III or Tier IV managed data center. Preference will be given to Tier III or Tier IV managed data centers.

(s) The extent to which the project will provide for information technology services to the state or to the applicant at a price discounted from the fair market value of the services.

(t) The extent to which the project will provide for information technology services to a technology related businesses in the state, at a price discounted from the fair market value of the services.

(u) The extent to which the project will facilitate the expansion or retention of a business developed at the University of Wyoming Business Technology Center.

(v) In order to determine compliance with Article 16, Section 6 of the Wyoming Constitution, the Council staff will consult with the Attorney General when evaluating a request to fund a “Business Committed” project outlined in Chapter 2, Section 1, any project involving a private developer, or a “Managed Data Center Cost Reduction Grant” outlined in Chapter 2 Section 4. The application and the Council recommendation will be reviewed by the Attorney General using the following criteria:

(i) A public purpose must exist;
(ii) Adequate consideration must be exchanged; and

(iii) Statutory authority must exist.

(w) The extent to which the project is ready to begin construction. Projects have secured financing, permits and licenses, zoning classifications, annexation, appraisals, and purchase agreements, necessary to complete the project.

Section 13. Grant Match Requirements.

(a) A grant in an amount up to $250,000 for a “Business Committed” or “Community Readiness” project outlined in Chapter 2, Sections 1 and 2 shall require a minimum match of 5 percent of eligible project activity costs.

(b) A grant in an amount over $250,000 for a “Business Committed” project outlined in Chapter 2, Sections 1 and 2 shall require a minimum match of 10 percent of eligible project activity costs.

(i) A grant in an amount over $250,000 for a “Business Committed” Child Care/ Senior Care project outlined in Chapter 2, Sections 1 and 2 shall require a minimum match of 15 percent of eligible project activity costs.

(c) A grant in an amount over $250,000 for a “Community Readiness” project outlined in Chapter 2, Sections 1 and 2 shall require a minimum match of 15 percent of eligible project activity costs.

(i) A grant in an amount over $250,000 for a “Community Readiness” Main Street Downtown project outlined in Chapter 2, Sections 1 and 2 shall require a minimum match of 15 percent of eligible project activity costs.

(d) A grant for a “Community Enhancement” project outlined in Chapter 2, Section 3 shall require a minimum match of 50 percent of eligible project activities.

(e) A grant for a “Managed Data Center Cost Reduction” project outlined in Chapter 2 Section 4 shall require a minimum private investment that is at least 125% percent greater than the “Data Center Cost Reduction” grant. No less than 50% of the match shall be calculated by the net wages of those employees earning 150% the county median wage for all occupations in all industries within the county in which the project will take place. No more than 50% of the match shall be calculated by private capital investments in taxable items.

(f) Applicants can use the special assistance loan fund to complete minimum match requirements. Terms and specifications related to special assistance loan funds are addressed in Chapter 3 of the Business Ready Communities Program Rules.
Section 14. **Fund Disbursement and Project Monitoring**

(a) Procurement Standards. All applicants must follow the state procurement regulations that exist in statute for cities and towns. If a non-municipal applicant has produced a procurement policy, staff or qualified consultants reserve the right to review that policy prior to fund disbursement.

(b) Fund Disbursement. Funds shall be disbursed to the applicant only as needed to discharge obligations incurred in accordance with the Board approved eligible project costs. Request for disbursement shall be made on a form supplied by Council staff and supported by adequate proof that such an obligation has been incurred for the project purpose and is due and owing.

(c) Fund reversion.

(i) If the Council staff determines that a business participating in a “Managed Data Center Cost Reduction” project outlined in Chapter 2 Section 4 is not operating within one year from the time the grant is approved, the grant will automatically expire. Based on information supplied by the grantee, Council staff may grant an extension of time in which the business must start operations.

(ii) If the Council staff determines that the project has not been completed within a reasonable time, Council staff shall notify the applicant in writing at least thirty (30) days prior to presenting the matter for Council review.

(iii) If the Council staff determines that the project is complete, but the full amount of the grant or loan has not been expended, the Council staff shall notify the grantee of this determination. Thirty (30) days following the notification, the unused portion of the grant or loan shall revert to uncommitted status.

(iv) If the Council staff determines that five years has elapsed since the commencements of operations of a business participating in a “Managed Data Center Cost Reduction” project outlined in Chapter 2, Section 4 and the match requirement has not been met, then the full amount of grant funding paid to the applicant shall be reimbursed to the Council.

(v) For projects that have not started within one year: Council staff will notify a grantee/borrower of a pending expiration prior to the one year anniversary of the grant/loan approval. The grantee/borrower can submit a written request to continue the project. Council staff may request new and/or updated information and documentation. Council staff may recommend and the Council may grant an extension of time in which to start the project.

(vi) For projects with contingencies: Council staff will request monthly update on the status of the contingencies. If the contingency timeline lapses without the contingencies having been met, then the grant/loan award will expire. The
grantee/borrower has the option to submit a new application or can request an extension or modification of the contingency terms through the Council staff. Council staff may recommend and the Council may grant an extension of time or modification to the contingencies.

(d) Project Monitoring.

(i) Reports. Within 15 calendar days at the conclusion of each calendar quarter during the term of the grant or loan contract, the applicant shall supply council staff with a progress report. Each progress report shall set forth in narrative form the work accomplished under the grant or loan during the quarter and shall include a financial status report. At the end of the project, the applicant shall furnish Council staff with a comprehensive report of the project. The applicant shall likewise furnish Council staff with a cumulative financial statement, reflecting total expenditure pursuant to this grant agreement.

(ii) Audits and inspections. The Council staff may, at its expense, conduct an audit of the records of the applicant and inspect the construction and operation of the project.

(iii) Record retention. Grantee agrees to retain all records related to the project for three (3) years following Council staff’s date of notice to grantee of closeout of the grant.

(e) Project Evaluation.

(i) Reports. The grantee shall submit periodic narratives evaluating program outcomes against established measures. Council Staff shall stipulate the frequency and content of the report, tailored to the specific nature to each grant or loan, in agreements between the Council and the grantee.

(ii) Evaluation results. The Council shall use the evaluation report information to measure program outcomes, to promote learning from experience and to improve program performance. Evaluation results will be available to other grantees.
Chapter 2

BUSINESS READY COMMUNITY GRANTS

Section 1. Business Committed to Start-Up, Retain, Locate or Expand Project. This is an infrastructure project where an applicant has a business committed to start up, retain, expand or locate in the community, or a business that requires educational development infrastructure such as workforce training facilities. Funds may be set-aside for this type of project with the amount to be determined by the Council. The purpose of the set-aside is to create a rapid response fund in order to react to immediate opportunity when an applicant has a business committed to expand or locate.

(a) Application Submittal Requirements. An applicant shall submit four (4) copies of its completed application to the Council staff. It will include:

(i) An application form provided by the Council staff.

(ii) A copy of the certificate of incorporation of the organization, if the project will be carried out by contract with a Community Development Organization or State Development Organization.

(iii) A full description of the proposed project.

(iv) A clear budget statement of the source and use of all funds needed to complete the project. An explanation of the level of commitment of other funds to complete the project. The budget must be supported by an engineer’s or architect’s estimate of project costs. Grants will be made only to applicants who demonstrate that upon receipt of the grant all project costs will be funded.

(v) A detailed map of the site showing the location of the business and the infrastructure to be funded.

(vi) The business(es) to benefit from the infrastructure must provide the following information which will be used to determine the viability of the benefiting business. The grant may not be approved if the business is determined not to be viable.

(A) A business plan for the expansion.

(B) Three years of financial statements, for an existing business, to include profit and loss and balance sheet.

(C) Financial projections for three years.

(D) Number, type and pay scale for the jobs to be created.
(E) A signed agreement/contract between the applicant and the business(es) agreeing that the expansion or relocation will occur and under what conditions.

(F) A workforce recruitment and/or training program.

(vii) A copy of the certificate of organization filed with the Secretary of State and a copy of an executed joint powers agreement approved by the Attorney General, if the applicant is a joint powers board.

(viii) A copy of the signed resolution of support from the applicant or the member agencies if the applicant is a joint powers board.

(ix) Signed memorandum of understanding agreement that outlines future operations and maintenance schedules, funding, and responsible parties.

(x) A signed lease agreement or a memorandum of agreement with regard to the terms of a lease agreement, if applicable.

(xi) If the committed business provides social services, the applicant must also submit information required in Chapter 2, Section 2 (a).

(xii) An applicant and/or eligible Community Development Organization must develop a recapture plan for revenue generated as a result of a project, either through the sale or lease of real property. The plan must anticipate revenue streams and economic development expenditures or programming paid for with the anticipated revenue streams.

(xiii) The applicant must schedule a consultation with a WYOMING BUSINESS COUNCIL Regional Director to discuss the project. The Wyoming Business Council Regional Director will submit preliminary comments and concerns along with the application.

(xiv) Other applicable information as requested by the Council staff.

(b) Grant and/or loan amount. An annual maximum of $1,500,000. Applicants can request additional funds from the Special Assistance Loan Fund.

(i) Child Care / Senior Care “Business Committed” requests. An annual maximum of $1,000,000.

(ii) Applicants can request an additional $1,500,000 funds under the loan component of the program.

(c) Previous applicant. An Applicant must show that satisfactory performance has been demonstrated under previous grants awarded through this program.
Section 2. **Community Readiness Project.** No specific business is committed to expand or locate in the applicant’s community. The applicant wants to build facilities to ready itself for new business development and/or facilities for labor force or entrepreneurial training under a specific strategy or plan of action. For example, development of a business or industrial park, or training facilities.

(a) Planning Requirements for a Community Readiness Project. An applicant must demonstrate that appropriate planning has been conducted and capacity exists to accommodate new business development in order to insure success of the project. Information must be submitted along with the grant application or may be submitted independent of a grant application in order for the Council staff to determine an applicant’s readiness for a project. This is demonstrated by having some or all of the following items in place as appropriate.

(i) A current Comprehensive Economic Development Strategy (CEDS) covering the area.

(ii) A recent labor force availability study, quantifying such things as unemployment, underemployment, wage distributions, commuting patterns, skill availability and educational levels.

(iii) A targeted marketing and recruitment strategy, if recruitment of outside companies is contemplated. This needs to include identification of the group(s) responsible for marketing the facility.

(iv) A recent housing availability study for the area.

(v) A priority listing of proposed infrastructure projects and sites related to economic development along with preliminary cost estimates for land acquisition, final engineering and construction.

(vi) Any special plans or studies related to specialized labor skills, raw material availability, local feedstock materials or other material which tend to support the overall development strategy for the area.

(vii) Other appropriate plans or studies, such as educational, workforce, or entrepreneurial development plans, studies or programs, which support the proposed project and indicate its chances of achieving success in creating or retaining new primary jobs.

(b) Application Submittal Requirements for Readiness Project. An Applicant shall submit four (4) copies of its completed application to the Council staff. Along with the planning information required in Section 2 (a) (i) thru (vii), the following project specific information must be submitted with an application:

(i) An application form provided by the Council staff.
(ii) A full description of the proposed project.

(iii) A clear budget statement of the sources and uses of all funds needed to complete the project. An explanation of the level of commitment of other funds to complete the project. The budget must be supported by an engineer’s or architect’s estimate of project costs. Grants will be made only to applicants that demonstrate that upon receipt of the grant all projected project costs will be funded.

(iv) A detailed map of the site showing the location of the infrastructure to be funded.

(v) A copy of the certificate of organization filed with the Secretary of State, and a copy of an executed joint powers agreement approved by the Attorney General, if the applicant is a joint powers board.

(vi) A copy of the certificate of incorporation of the organization, if the project will be carried out by contract with a Community Development Organization or State Development Organization.

(vii) A copy of the signed resolution of support from the applicant or the member agencies if the applicant is a joint powers board.

(viii) A signed memorandum of understanding or agreement that outlines future operations and maintenance schedules, funding, and responsible parties.

(ix) If the project involves a private developer, the applicant must also submit information required in Chapter 2, Section 2 (a) and provide information about why it is necessary for public assistance in the private project and the consideration exchanged for the public assistance.

(x) An applicant and/or eligible Community Development Organization must develop a recapture plan for revenue generated as a result of a project, either through the sale or lease of real property. The plan must anticipate revenue streams and economic development expenditures or programming paid for with the anticipated revenue streams.

(xi) The applicant must schedule a consultation with a Wyoming Business Council Regional Director to discuss the project. The WYOMING BUSINESS COUNCIL Regional Director will submit preliminary comments and concerns along with the application.

(xii) Other applicable information as requested by the Council staff.
(c) Grant and/or loan amount. An annual maximum of $1,000,000.

   (i) Main Street/Downtown “Community Readiness” requests. An annual maximum of $1,000,000. Applicants can request an additional $1,500,000 funds under the loan component of the program.

   (ii) Applicants can request an additional $1,500,000 from the Special Assistance Loan Fund.

(d) Previous applicant: An applicant must show that satisfactory performance has been demonstrated under previous grants awarded through this program.

Section 3. **Community Enhancement Project.** An applicant wants to improve the community’s aesthetic character or quality of life through such activities as landscaping or recreational or convention facilities in order to make itself more attractive for business development under a specific strategy or plan of action. No specific business is committed to expand or locate in the applicant’s community.

(a) Planning Requirements for a Community Enhancement Project. An applicant must demonstrate that appropriate planning has been conducted and need exists to enhance the community. This is demonstrated by having some or all of the following items in place as appropriate.

   (i) A current comprehensive plan, Comprehensive Economic Development Strategy (CEDS), Community Assessment, Certified Tourism Community planning, or Main Street™ planning approach covering the area.

   (ii) A priority listing of proposed community enhancement projects and sites related to economic development along with preliminary cost estimates.

   (iii) Other appropriate plans or studies which support the proposed project and indicate its chances of achieving success in fulfilling economic development goals.

(b) Application Submittal Requirements for a Community Enhancement Project. An applicant shall submit three (3) copies of its completed application to the Council staff. Along with the planning information required in Section 3 (a) (i) thru (iii), the following project specific information must be submitted with an application:

   (i) An application form provided by the Council staff.

   (ii) A full description of the proposed project.

   (iii) A clear budget statement of the sources and uses of all funds needed to complete the project. An explanation of the level of commitment of other funds to complete the project. The budget must be supported by an expert’s estimate of
project costs. Grants will be made only to applicants that demonstrate that upon receipt of the grant all projected project costs will be funded.

(iv) A detailed map of the site showing the location of the improvements to be funded.

(v) A copy of the certificate of organization filed with the Secretary of State, and a copy of an executed joint powers agreement approved by the Attorney General, if the applicant is a joint powers board.

(vi) A copy of the certificate of incorporation of the organization, if the project will be carried out by contract with a Community Development Organization or State Development Organization.

(vii) A copy of the signed resolution of support from the applicant or the member agencies if the applicant is a joint powers board.

(viii) A signed memorandum of understanding agreement that outlines future operations and maintenance schedules, funding, and responsible parties.

(ix) Proof that funding has been sought from other sources or that no other funding sources exist.

(x) An applicant and/or eligible Community Development Organization must develop a recapture plan for revenue generated as a result of a project, either through the sale or lease of real property. The plan must anticipated revenue streams and economic development expenditures or programming paid for with the anticipated revenue streams.

(xi) The applicant must schedule a consultation with a Wyoming Business Council Regional Director to discuss the project. The WYOMING BUSINESS COUNCIL Regional Director will submit preliminary comments and concerns along with the application.

(xii) Other applicable information as requested by the Council staff.

(c) Grant and/or Loan amount. An annual maximum of $250,000. Applicants can request an additional $1,500,000 from the Special Assistance Loan Fund

(d) Previous applicant: An applicant must show that satisfactory performance has been demonstrated under previous grants awarded through this program.

(e) Applicants with projects that enhance their Certified Tourism Community Program or Main Street Program will be given preference.
Section 4. **Managed Data Center Cost Reduction Program.** This is a project in which an applicant wants to improve the development, recruitment, or expansion of data generation and information technology storage capabilities at a Tier II, Tier III, or Tier IV level that are otherwise nonexistent or are in insufficient supply. Funds are set-aside for this program with the determined by the Legislature.

(a) Grant amount. The maximum grant amount is $2,250,000. The grant amount will be determined by the business’ match amount. The following table shows three possible grant amounts and the required match.

<table>
<thead>
<tr>
<th>Total Grant Amount</th>
<th>Percent of Minimum Consideration</th>
<th>Minimum Required Match (Realized over 5 Years)</th>
<th>Minimum Percent of Required Consideration Comprised of Wages (100% of which are 150% above County Median)</th>
<th>Minimum Required Wages (100% of which are 150% above County Median)</th>
<th>Maximum Private Capital Investment in Taxable Items Allowable as Consideration</th>
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</tbody>
</table>

b) Grant disbursements

(i) Funds will only be disbursed for businesses that are in operation in the jurisdiction of the applicant

(ii) Funds will be disbursed over three years.

(iii) Annual grant disbursements may total no more than 1/3 the total amount, in addition to the unused balance available from previous grant years.

c) Application Submittal Requirements. An applicant shall submit four (4) copies of its completed application to the Council staff. It will include:

(i) An application form provided by the Council staff.

(ii) A full description of the proposed project.

(iii) A clear budget statement of the source and use of all funds necessary for the commencement of business operations.

(iv) A detailed map of the site showing the location of the business.

(v) Evidence that there is or will be infrastructure, architecture, and services necessary for the support of a Tier II, Tier III or Tier IV data center.
(vi) The business to benefit from the cost reduction must provide a thorough business plan which shall include, at a minimum:

(A) A business description including an evaluation of the Tier classification.

(B) Management qualifications.

(C) Three years of financial statements

(D) Financial projections for three years.

(E) Number, type and pay scale for the jobs to be created.

(F) A workforce recruitment and/or training program, if necessary.

(vii) A copy of the signed resolution of support from the applicant.

(viii) A signed contingency agreement between the applicant and the business agreeing that the expansion or relocation will occur and under what conditions. At a minimum, the contingency agreement must include:

(A) An agreement that the business will repay all grant funds at a reasonable rate of return as negotiated with the applicant and approved by the Council if the business relocates from the political subdivision prior to the expiration of five (5) years from first receiving funds.

(B) An agreement that the business will repay all grant funds expended at a reasonable rate of return as negotiated with the applicant and approved by the Council if the business does not meet its match requirements within five (5) years from first receiving funds.

(C) An understanding of the required match and job creation requirements.

(D) The terms of the fund dispersions and a statement of which utility costs will be reduced using the grant funds and in what amount.

(E) An understanding of the timeline for the business to become operational.

(F) An offer by the business and an acceptance or declination by the applicant to provide a stated amount of information technology services to the applicant at a price discounted from the fair market value of the services.
(ix) The signed contingency may also include a commitment by the business to offer a stated amount of information technology services to the state or a Wyoming based technology related business at a price discounted from the fair market value of the services.

(x) The applicant must schedule a consultation with a WYOMING BUSINESS COUNCIL Regional Director to discuss the project. The Wyoming Business Council Regional Director will submit preliminary comments and concerns along with the application.

(xi) Other applicable information as requested by the Council staff.
Chapter 3
BUSINESS READY COMMUNITY LOANS

Section 1. General Policy. A loan may be made to fund a portion of any infrastructure revenue generating public facility that is an eligible activity. For example, a project that generates revenue from lease payments for a building or sale of lots in an industrial or commercial park. In no event shall a loan be made to pay off or refinance an existing loan.

(a) A general Business Ready Community Loan may be made to fund all of the funding request or fund in conjunction with a Business Ready Community Grant request.

(b) A Special Assistance Loan may be used to loan additional funding in excess to the maximum award amount and/or the full or partial funding of the required match.

Section 2. Application Submittal Requirements.

(a) Application Submittal Requirements. An applicant shall submit four (4) copies of its completed application to the Council staff. It will include:

(i) An application form provided by the Council staff.

(ii) A copy of the certificate of incorporation of the organization, if the project will be carried out by contract with a Community Development Organization or State Development Organization.

(iii) A full description of the proposed project.

(iv) A clear budget statement of the sources and uses of all funds needed to complete the project. An explanation of the level of commitment of other funds to complete the project. The budget must be supported by an engineer’s or architect’s estimate of project costs. A loan will be made only to an applicant that demonstrates that upon receipt of the loan all projected project costs will be funded.

(v) A detailed map of the site showing the location of the infrastructure to be funded.

(vi) A copy of the certificate of organization filed with the Secretary of State and a copy of an executed joint powers agreement approved by the Attorney General, if the applicant is a joint powers board.

(vii) A copy of the signed resolution of support from the applicant or the member agencies if the applicant is a joint powers board.

(viii) The source of repayment of the loan.
(ix) Proposed security for the loan.

(x) In order for the Council to determine the ability of the applicant to repay a loan and to aid the Attorney General in evaluating the legality of the proposed indebtedness, an applicant shall provide an annual budget for the preceding and current fiscal years and a completed financial statement provided on a "General Financial Information" form provided by the Council staff, that includes, but is not limited to the following information:

(A) Assessed valuation for the current and two preceding fiscal years;

(B) Total bonded and non-bonded indebtedness, including outstanding principal balance, interest rate, and remaining term;

(C) Total mills levied within the jurisdiction of the applicant for the current and two preceding years; and, a breakdown of the mill levy for the current fiscal year;

(D) Sales and use tax imposed within the jurisdiction of the applicant;

(E) A summary of the applicant's total investments and cash balances for the two preceding fiscal years;

(xi) The applicant must schedule a consultation with a WYOMING BUSINESS COUNCIL Regional Director to discuss the project. The Wyoming Business Council Regional Director will submit preliminary comments and concerns along with the application.

(xii) Other applicable information as requested by the Council staff.

Section 3. **Loan Amount.**

(a) The general Business Ready Community Loan maximum is $1,500,000 per application.

(b) A Special Assistance Loan maximum is $1,500,000 per project.

Section 4. **Interest Rate and Term.**

(a) A general Business Ready Community loan and a Special Assistance Loan shall be made at a no or low interest rate as recommended by the Council and established by the Board.
Section 5. **Security Interest.**

(a) A loan shall be adequately collateralized as recommended by the Council and determined by the Board. The Council may recommend and the Board may require a first position security interest in the revenue generating facility and the related user fees or assessments. Other security may be required as determined by the Council and approved by the Board.

(b) If a lien is required on the facilities, the applicant shall:

(i) Maintain adequate insurance on the facility;

(ii) Pay all applicable taxes and assessments when due;

(iii) Maintain the facility in good condition.

Section 6. **Attorney General Opinion.** No loan shall be made without the written opinion of the Attorney General certifying the legality of the transaction and all loan documents. An election approving the project and borrowing for the project by the qualified electors of the borrowing entity shall be required only if the Attorney General determines such an election is otherwise required by law.

Section 7. **Evaluation.**

(a) Criteria. The Council staff shall evaluate an application and will formulate a recommendation to the Council utilizing the following criteria:

(i) Whether the user fees or assessments generated by the project will be sufficient so that the loan may be considered a reasonable and prudent investment of state funds.

(ii) Whether the applicant is current on all its repayment obligations to the Business Ready Community account or other state loan accounts.

(iii) The extent to which the applicant demonstrates an increase in the number of primary jobs created or retained by the project.

(iv) The extent to which the applicant meet the evaluation criteria stated in Chapter 1, Section 12.

(b) Interagency Consultation. The Council staff shall request that pertinent state agencies assist in the review of the applications and provide comments to the Council staff for Council and Board consideration.
Section 8. **Council Consideration.** The Council shall consider each application, allow for comments from the public, the applicant, and the Council staff and refer to the Board the application with a recommendation including the amount of the loan, the term of the loan, and the type of security required to secure the loan.

Section 9. **Disbursement of Loan Proceeds.** At closing, the loan proceeds shall be deposited in an interest-bearing escrow account to be disbursed solely for the approved loan purposes. The borrower shall pay the costs of the escrow account. Interest earned shall be credited to the borrower. Borrower shall submit all requests for payment on a form provided by the Council staff, with supporting documentation. The Council staff shall approve or disapprove pay requests in whole or in part within 5 working days and notify escrow bank of the amount to be disbursed to the borrower.
CIVIL/WATER RESOURCE ENGINEERING

- Pumps and pipelines
- Surface and groundwater modeling
- FEMA floodplain assessments
- Hydraulic and hydrologic analysis and design
- Dam design and rehabilitation
- Water supply, treatment and distribution
- Wastewater treatment and disposal
- Irrigation systems
- GPS and conventional surveying
- Civil engineering design, plans and specifications
- Construction engineering
- Water rights
- Computer-aided design and drafting (CADD)
- GIS mapping
- Stormwater management
- Geotechnical sampling
- 404 permits

MINE SERVICES

- NEPA compliance documents
- Baseline studies (climatology, geology, hydrology, wetlands and AVF assessments)
- GPS and conventional surveying
- Drilling and monitoring services
- Mining and reclamation design and permitting
- Hydrologic control plans
- Reservoir and dam design
- Haulroads and stream crossings
- Annual reports and bond calculations
- Blast monitoring and reporting
- Assessment of probable hydrologic consequences
- Mine simulation modeling
- Postmine topography design
- Reclaimed stream channels, AVF reclamation and wetland mitigation design
- Abandoned mine land reclamation

ENVIRONMENTAL SERVICES

- Environmental compliance and best management practices
- Environmental impact analysis and regulatory permitting
- Environmental site assessments
- Geomorphologic investigations
- Hydrocarbon product recovery system design
- Hydrologic and water quality monitoring
- Hazardous and non-hazardous waste management planning
- Site remediation planning and design
- Soil and groundwater cleanup plans
- Underground storage tanks investigation and removal plans
- NEPA compliance documents
- Environmental audits
- Wetland delineation and mitigation

TRANSPORTATION SERVICES

- Reconnaissance reports
- Surveys (right of way, ground control, construction)
- Bridge hydraulics, scour analysis, structure selection
- Design of urban streets, rural roadways and interstate reconstruction
- Streetscape enhancements
- Utility replacement
- Drainage design
- Bicycle/pedestrian pathways
- Parking facilities
- Construction administration

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